



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R09-OAR-2020-0079; FRL-9291-01-R9]

Air Plan Approval; California; San Joaquin Valley Unified Air Pollution Control District

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is taking final action to partially approve a revision to the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) portion of the California State Implementation Plan (SIP). This revision concerns emissions of oxides of nitrogen (NO_x) and fine particulate matter (PM_{2.5}) from off-road diesel agricultural vehicles and equipment. We are approving portions of a local measure to reduce emissions from these sources under the Clean Air Act (CAA or the Act) and deferring action on the remaining portions of this measure.

DATES: This rule is effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA-R09-OAR-2020-0079. All documents in the docket are listed on the <http://www.regulations.gov> web site. Although listed in the index, some information is not publicly available, *e.g.*, Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available through <http://www.regulations.gov>, or please contact the person identified in the “**FOR FURTHER INFORMATION CONTACT**” section for additional availability information. If you need assistance in a language other than English or if you are a person with disabilities who

needs a reasonable accommodation at no cost to you, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section.

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SUPPLEMENTARY INFORMATION: Throughout this document, “we,” “us” and “our” refer to the EPA.

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I. Background

On March 24, 2020 (85 FR 16588), the EPA proposed to approve the following measure, submitted by the California Air Resources Board (CARB), into the California SIP.

Local Agency	Resolution #	Measure Title	Adopted	Submitted
CARB	19-26	“San Joaquin Valley Agricultural Equipment Incentive Measure,” as amended by “Additional Clarifying Information for the San Joaquin Valley Agricultural Equipment Incentive Measure.”	12/12/19	02/11/20

We proposed to approve the San Joaquin Valley Agricultural Equipment Incentive Measure, as amended (hereafter “Valley Incentive Measure”), based on a determination that it satisfies the applicable CAA requirements for approval of voluntary measures for SIP emission reduction credit. Our proposal was based on our evaluation of the documents provided in the SIP

submission, including the measure itself (i.e., the State commitments set forth on pages 7-12 of CARB Resolution 19-26, as amended by the “Additional Clarifying Information for the San Joaquin Valley Agricultural Equipment Incentive Measure”) and CARB’s analysis of the measure in a document entitled “San Joaquin Valley Agricultural Equipment Incentive Measure – Quantifying the Funded Emission Reductions from Moyer, NRCS, and FARMER Programs to Achieve SIP Credit,” Release Date: November 8, 2019 (hereafter “Demonstration”). Our proposed rule and associated technical support document (TSD)¹ contain more information about the SIP submission and our evaluation thereof.

On March 27, 2020 (85 FR 17382), as part of the EPA’s proposal to approve most elements of California’s attainment plan for the 2006 PM_{2.5} NAAQS in the San Joaquin Valley (“2006 NAAQS Plan”), the EPA proposed to credit the Valley Incentive Measure with specific amounts of NO_x and PM_{2.5} emission reductions toward the State’s aggregate emission reduction commitments for 2024 in this plan. Specifically, the EPA proposed to find that the Valley Incentive Measure would achieve 5.9 tons per day (tpd) of NO_x reductions and 0.3 tpd of direct PM_{2.5} reductions by 2024, as part of the State’s control strategy for attaining the 2006 PM_{2.5} NAAQS in the San Joaquin Valley by December 31, 2024.² We did not, however, finalize this element of our March 27, 2020 proposal because, as of the date of our final action on the 2006 NAAQS Plan, we had not yet approved the Valley Incentive Measure into the SIP.³

On November 24, 2020, CARB submitted technical clarifications and corrections to the Valley Incentive Measure that clarify, among other things, CARB’s commitment to make certain documents concerning the incentive projects implemented to achieve emission reductions available to the public upon request. CARB adopted these technical clarifications and corrections

¹ EPA Region IX, “Technical Support Document for EPA’s Rulemaking for the California State Implementation Plan, California Air Resources Board Resolution 19-26, San Joaquin Valley Agricultural Equipment Incentive Measure,” February 2020 (hereafter “TSD”).

² 85 FR 17382, 17412.

³ 85 FR 44192, 44204 (July 22, 2020).

to the measure by Executive Order S-20-031 (November 23, 2020).⁴ These technical clarifications and corrections to the Valley Incentive Measure incorporate all amendments contained in the “Additional Clarifying Information for the San Joaquin Valley Agricultural Equipment Incentive Measure.” We refer to the executive order adopting these technical clarifications and corrections as the “Technical Corrections Document.”

On October 6, 2021, CARB submitted an additional clarification to the Valley Incentive Measure stating that CARB’s commitments for “aggregated emissions reductions and pieces of agricultural equipment” in the measure may be achieved through any combination of the referenced incentive programs. CARB adopted this clarification to the measure by Executive Order S-21-018 (October 6, 2021).⁵ CARB’s submittal letter explains that this clarification to the Valley Incentive Measure makes the commitment “severable” so that the EPA “may address the associated emissions reductions and pieces of agricultural equipment from the incentive programs individually as needed.”⁶ We refer to the executive order adopting this clarification as the “2021 Clarification Document.”

The 2006 NAAQS Plan is contained within an integrated PM_{2.5} attainment plan submitted by CARB on May 10, 2019, that also contains, inter alia, California’s Serious area attainment plan for the 2012 annual PM_{2.5} NAAQS in the San Joaquin Valley (the “2012 NAAQS Plan”).⁷ For purposes of this action we refer to the 2006 NAAQS Plan and 2012 NAAQS Plan together as

⁴ Letter dated November 23, 2020, from Richard W. Corey, Executive Officer, CARB, to John W. Busterud, Regional Administrator, EPA Region IX (transmitting, inter alia, CARB Executive Order S-20-031, “Adoption and Submittal of Technical Clarifications and Typographical Error Corrections to the San Joaquin Valley Agricultural Equipment Incentive Measure,” November 23, 2020 (hereafter “Technical Corrections Document”).

⁵ Letter dated October 6, 2021, from Richard W. Corey, Executive Officer, CARB, to Deborah Jordan, Acting Regional Administrator, EPA Region IX (transmitting CARB Executive Order S-21-018, “Adoption and Submittal of Commitment Clarifications to the San Joaquin Valley Agricultural Equipment Incentive Measure,” October 6, 2021 (hereafter “2021 Clarification Document”).

⁶ CARB submitted the 2021 Clarification Document in response to the EPA’s email dated June 2, 2021, which contained two PDF attachments identifying, in redline and strikeouts, suggested edits to the Valley Incentive Measure to remove all references to NRCS projects and associated commitments. E-mail dated June 2, 2021, from Rebecca Newhouse (EPA) to Sylvia Vanderspek (CARB), RE: “SJV ag tractor incentive measure” (including attachments).

⁷ Letter dated May 9, 2019, from Richard Corey, Executive Officer, CARB, to Mike Stoker, Regional Administrator, EPA Region 9 (transmitting the “2018 Plan for the 1997, 2006, and 2012 PM_{2.5} Standards” (“2018 PM_{2.5} Plan”) and the “San Joaquin Valley Supplement to the 2016 State Strategy for the State Implementation Plan” (“Valley State SIP Strategy”). The SJVUAPCD developed and adopted the 2018 PM_{2.5} Plan, and CARB developed and adopted the Valley State SIP Strategy. 85 FR 44192, 44193.

the “SJV PM_{2.5} Plan,” and to the portion of the SJV PM_{2.5} Plan that the SJVUAPCD developed and adopted as the “2018 PM_{2.5} Plan.” The SJV PM_{2.5} Plan lists the Valley Incentive Measure as one of several defined measures that CARB intended to adopt in order to fulfill, in part, its aggregate tonnage commitments in the SJV PM_{2.5} Plan. Specifically, the 2006 NAAQS Plan relies on the 2024 tonnage commitment in the Valley Incentive Measure to achieve a portion of the emission reductions necessary for attainment of the 2006 PM_{2.5} NAAQS by the end of 2024,⁸ and the 2012 NAAQS Plan relies on the 2025 tonnage commitment in the Valley Incentive Measure to achieve a portion of the emission reductions necessary for attainment of the 2012 PM_{2.5} NAAQS by the end of 2025.⁹

II. Summary of Final Action and Rationale

We are taking final action to approve into the California SIP specific portions of the Valley Incentive Measure, as amended and clarified by the Technical Corrections Document and the 2021 Clarification Document, based on our conclusion that these portions of the measure satisfy CAA requirements for approval. Our March 24, 2020 proposed rule (85 FR 16588), the associated TSD, and our responses to comments in this final rule provide our rationale for finding that these portions of the measure are enforceable and satisfy CAA requirements for SIP approval, as interpreted in the EPA’s guidance. Upon our approval of these portions of the Valley Incentive Measure into the SIP, they become enforceable under the CAA and creditable for SIP purposes. Accordingly, we are also taking final action to credit these portions of the Valley Incentive Measure with specific amounts of NO_x and direct PM_{2.5} emission reductions toward the 2024 aggregate tonnage commitments in the 2006 NAAQS Plan, which we

⁸ 2018 PM_{2.5} Plan, Chapter 4, Section 4.4 (“CARB Emission Reduction Commitment for the San Joaquin Valley”) and Valley State SIP Strategy, Chapter 3 (“Supplemental State Commitment from the Proposed State Measures for the Valley”). See also 85 FR 17415-17416 (March 27, 2020) (proposed rule to approve relevant portions of SJV PM_{2.5} Plan for 2006 PM_{2.5} NAAQS purposes, discussing plan’s reliance on San Joaquin Valley Agricultural Incentive Measure) and 85 FR 44192 (July 22, 2020) (final rule approving relevant portions of SJV PM_{2.5} Plan for 2006 PM_{2.5} NAAQS purposes).

⁹ 2018 PM_{2.5} Plan, Chapter 4, Section 4.4 (“CARB Emission Reduction Commitment for the San Joaquin Valley”) and Valley State SIP Strategy, Chapter 3 (“Supplemental State Commitment from the Proposed State Measures for the Valley”).

previously approved into the SIP.¹⁰ We are deferring action on the remaining portions of the Valley Incentive Measure.

As noted in section I above, the EPA previously proposed to fully approve the Valley Incentive Measure and to credit the measure with 5.9 tpd of NO_x reductions and 0.3 tpd of direct PM_{2.5} reductions toward the 2024 aggregate tonnage commitments in the 2006 NAAQS Plan but did not finalize this proposal because, as of the date of our final action on the 2006 NAAQS Plan, we had not yet approved the Valley Incentive Measure into the SIP.¹¹ In this rule we are finalizing our proposal only with respect to those portions of the Valley Incentive Measure, as amended, that pertain to incentive projects implemented under California's Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) and Funding Agricultural Replacement Measures for Emission Reductions Program (FARMER Program). We are deferring action on those portions of the Valley Incentive Measure that pertain to incentive projects implemented under the United States Department of Agriculture's Natural Resources Conservation Service (NRCS) Environmental Quality Incentives Program (EQIP). The docket for this rulemaking contains a copy of those portions of the Valley Incentive Measure, as amended and clarified by the Technical Corrections Document and the 2021 Clarification Document, that we are approving into the SIP.¹² For convenience, we refer to those portions of the Valley Incentive Measure as the "Amended Valley Incentive Measure."

As we explained in the TSD supporting our proposed rule, the Carl Moyer projects that CARB may implement to fulfill its commitments in the Valley Incentive Measure are those projects subject to either "The Carl Moyer Program Guidelines, Approved Revisions 2011," revised December 18, 2015 (the "2011 Carl Moyer Guidelines"), or "The Carl Moyer Program

¹⁰ 85 FR 44192, 44205-44206 (July 22, 2020) (codifying CARB's aggregate tonnage commitments at 40 CFR 52.220(c)(536)((ii)(A)(2)).

¹¹ Id. at 44204.

¹² The portions of the Valley Incentive Measure that we are approving into the SIP are identified in two documents: (1) "CARB Resolution 19-26, approved portions" and (2) "Technical Corrections Document, approved portions." These two documents are attached to the e-mail dated June 2, 2021, from Rebecca Newhouse (EPA) to Sylvia Vanderspek (CARB), RE: "SJV ag tractor incentive measure," and are available in the docket for this rulemaking.

Guidelines, 2017 Revisions,” approved April 27, 2017 (the “2017 Carl Moyer Guidelines”).¹³

The FARMER projects that CARB may implement to fulfill its commitments in the Valley Incentive Measure are those projects subject to the “Final: Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program Guidelines,” release date: February 16, 2018 (“2018 FARMER Guidelines”), which generally must comply with the 2017 Carl Moyer Guidelines.¹⁴

CARB’s SIP submission and related support documents indicate that the portions of the Valley Incentive Measure, as amended, that pertain to incentive projects implemented under the Carl Moyer Program and FARMER Program will achieve 4.83 tpd of NO_x reductions and 0.24 tpd of PM_{2.5} reductions by 2024.¹⁵ We are, therefore, approving CARB’s commitments to achieve 4.83 tpd of NO_x reductions and 0.24 tpd of PM_{2.5} reductions by the beginning of 2024 through implementation of the Amended Valley Incentive Measure, and crediting the measure with these amounts of NO_x and PM_{2.5} emission reductions toward CARB’s aggregate tonnage commitments for 2024 in the 2006 NAAQS Plan.¹⁶ The 2006 NAAQS Plan shows that the San

¹³ TSD, 10-11.

¹⁴ TSD, 16-17 (noting that all FARMER projects that CARB relies on to comply with the Valley Incentive Measure are subject to the 2017 Carl Moyer Guidelines, future approved guidelines, and current and future program advisories and mail-outs, except as modified by CARB). See also Demonstration, 43-45 and 2018 FARMER Guidelines, 17-18. All FARMER projects identified in the project list included in CARB’s SIP submission are subject to the 2017 Carl Moyer Guidelines. Demonstration, Appendix J (“San Joaquin Valley Agricultural Equipment Incentive Measure, FARMER Project List”). Therefore, references herein to the 2017 Carl Moyer Guidelines apply to both Carl Moyer projects and FARMER projects. Should CARB revise the 2018 FARMER Guidelines at any point before May 15, 2025, it will be obligated under paragraph D.2 of CARB Resolution 19-26 to provide, in the annual demonstration report for the relevant year, a “description of any changes to the 2018 FARMER Guidelines and their related impacts on program integrity.” TSD, 17 (referencing Valley Incentive Measure, 11 (CARB Resolution 19-26, para. D.2)).

¹⁵ CARB, “Appendix I, San Joaquin Valley Agricultural Equipment Incentive Measure, NRCS Project List,” available as “Appendix I – Detailed” at <https://ww2.arb.ca.gov/resources/documents/implementation-state-sip-strategy> (last visited November 16, 2021) and also available as “ag_appx_i_detailed_021120.xlsx” in the docket for this rulemaking. The “NRCS Summary” tab of Appendix I identifies 1.07 tpd of NO_x emission reductions and 0.06 tpd of PM_{2.5} emission reductions achieved in 2024 through EQIP projects implemented by the NRCS. Subtraction of these amounts from CARB’s 2024 tonnage commitments in the Valley Incentive Measure (5.9 tpd NO_x reductions and 0.3 tpd PM_{2.5} reductions) results in 4.83 tpd of NO_x reductions (5.9 – 1.07 tpd) and 0.24 tpd of PM_{2.5} reductions (0.3 – 0.06 tpd), which CARB anticipates achieving through implementation of Carl Moyer and FARMER projects.

¹⁶ 85 FR 44192, 44205-44206 (July 22, 2020) (codifying CARB’s aggregate tonnage commitments at 40 CFR 52.220(c)(536)((ii)(A)(2)). In this rule we are codifying, in the appropriate paragraph under 40 CFR section 52.220(c), CARB’s commitments to achieve 4.83 tpd of NO_x reductions and 0.24 tpd of PM_{2.5} reductions by the beginning of 2024 through implementation of the Amended Valley Incentive Measure thereby enabling the EPA and citizens to enforce these commitments under the CAA. Our codification of these commitments constitutes a finding that CARB has achieved 4.83 tpd of the NO_x reductions and 0.24 tpd of the PM_{2.5} reductions that CARB must achieve by 2024 under its aggregate tonnage commitment at 40 CFR 52.220(c)(536)((ii)(A)(2)).

Joaquin Valley needs to achieve an additional 33.9 tpd of NO_x reductions and 2.2 tpd of PM_{2.5} reductions beyond baseline measures to attain the 2006 PM_{2.5} NAAQS by December 31, 2024.¹⁷ Thus, the SIP-creditable emission reductions attributed to the Amended Valley Incentive Measure constitute 14.2 percent of the additional NO_x reductions (4.83/33.9 tpd) and 10.9 percent of the additional PM_{2.5} reductions (0.24/2.2 tpd) necessary for attainment of the 2006 PM_{2.5} NAAQS in the San Joaquin Valley by December 31, 2024.¹⁸

Under longstanding guidance, the EPA has recommended presumptive limits on the amounts of emission reductions from certain voluntary and other nontraditional measures that may be credited in a SIP. Specifically, for voluntary mobile source emission reduction programs, the EPA has identified a presumptive limit of three percent of the total projected future year emission reductions required to attain the appropriate NAAQS, and for any particular SIP submittal to demonstrate attainment or maintenance of the NAAQS or progress toward attainment (RFP), three percent of the specific statutory requirement.¹⁹ The EPA may, however, approve measures for SIP credit in amounts exceeding the presumptive limits under certain circumstances, and where a clear and convincing justification is made by the State as to why a higher limit should apply in its case.²⁰

¹⁷ 85 FR 44192, 44204 (Table 1) (July 22, 2020).

¹⁸ These calculations are consistent with the EPA's recommended method for calculating the percentage of emission reductions attributed to voluntary mobile source measures for purposes of comparison to the EPA's presumptive limits on SIP credit for such measures. See EPA, "Guidance on Incorporating Voluntary Mobile Source Emission Reduction Programs in State Implementation Plans (SIPs)," October 24, 1997 ("1997 VMEP"), 5, fn. 3. In our March 27, 2020 proposal (85 FR 17382, 17412), we erroneously calculated the percentage of emission reductions attributed to the Valley Incentive Measure as a percentage of the total emission reductions needed for attainment from the base year to the attainment year, rather than as a percentage of the incremental reductions needed beyond baseline measures in the attainment year.

¹⁹ EPA, "Guidance on Incorporating Voluntary Mobile Source Emission Reduction Programs in State Implementation Plans (SIPs)," October 24, 1997, 5.

²⁰ EPA, "Improving Air Quality with Economic Incentive Programs" January 2001 ("2001 EIP Guidance"), 158 (recommending use of 2001 EIP Guidance to implement programs achieving more than the 3 percent limit where the State can directly implement and enforce the program against identifiable sources); EPA, "Diesel Retrofit and Replacement Projects: Quantifying and Using Their Emission Benefits in SIPs and Conformity: Guidance for State and Local Air and Transportation Agencies," March 2018 ("2018 Diesel Retrofits Guidance"), 12, 28 (noting that EPA will allow the 3 percent cap to be exceeded if the cap hinders the implementation of effective voluntary control measures, subject to notice and comment rulemaking); and EPA, "Guidance on Incorporating Bundled Measures in a State Implementation Plan," August 16, 2005, 8, n. 6 (noting that EPA may approve measures into a SIP exceeding the presumptive 6 percent limit for stationary source measures "where a clear and convincing justification is made by the State as to why a higher limit should apply in its case"). See also EPA, "Incorporating Emerging and Voluntary Measures in a State Implementation Plan (SIP)," September 2004, 9 ("2004 Emerging and Voluntary Measures Guidance").

The San Joaquin Valley's topography and meteorology present significant challenges for air quality. As stated in the 2018 PM_{2.5} Plan, "the surrounding mountains trap pollution and block airflow" and "[t]emperature inversions, while present to some degree throughout the year, can last for days during the winter, holding in nighttime accumulations of pollutants."²¹ In addition, the population of the area continues to grow at a rate higher than the statewide growth rate, leading to increased vehicular traffic along major highways that run through the San Joaquin Valley.²² Given these unique challenges, both the State and District continue to implement both traditional and non-traditional emission reduction strategies to attain the PM_{2.5} standards in the San Joaquin Valley, including regulatory programs, incentive programs, and rigorous outreach and education efforts.²³ Over the past several decades, the State and District have developed and implemented several comprehensive plans to address attainment of the NAAQS for ozone and particulate matter.²⁴ These attainment plans have resulted in the State's and District's adoption of numerous regulations for stationary, area, and mobile sources, including some of the most stringent control measures in the nation.²⁵ Given the air quality needs of the area, the numerous control measures that both the State and District have adopted and implemented in the San Joaquin Valley to date, the State's and District's successful implementation of the Carl Moyer program over the last two decades, and our experience to date quantifying emission reductions achieved through this program,²⁶ we believe it is appropriate to allow the State to rely on the

²¹ 2018 PM_{2.5} Plan, Chapter 2, 2-1.

²² *Id.* at 2-4.

²³ *Id.* at 2-2.

²⁴ See, e.g., 69 FR 30005 (May 26, 2004) (approving plan to attain the 1987 PM₁₀ NAAQS), 76 FR 69896 (November 9, 2011) (partially approving and partially disapproving plan to attain the 1997 PM_{2.5} NAAQS), 77 FR 12652 (March 1, 2012) (approving plan to attain the 1997 8-hour ozone NAAQS), 81 FR 19492 (April 5, 2016) (approving plan to attain the 1979 1-hour ozone NAAQS), and 85 FR 44192 (July 22, 2020) (approving plan to attain the 2006 PM_{2.5} NAAQS).

²⁵ 85 FR 44192 (July 22, 2020) (finding, *inter alia*, that California's attainment plan for the 2006 PM_{2.5} NAAQS in the SJV includes the best available control measures and most stringent measures as required by CAA section 188(e)). See also 85 FR 17382, 17412-17413 (March 27, 2020) (providing rationale for State's reliance on incentive measures for emission reductions exceeding 3 percent presumptive limit).

²⁶ The EPA has approved two incentive-based SIP submissions from CARB that rely on Carl Moyer projects for SIP emission reduction credit. See 86 FR 3820 (January 15, 2021) (full approval of South Coast incentive measure) and 81 FR 53300 (August 12, 2016) (limited approval/disapproval of "Emission Reduction Report" for San Joaquin Valley).

Amended Valley Incentive Measure to achieve 14.2 percent (4.83 tpd) of the additional NO_x reductions and 10.9 percent (0.24 tpd) of the additional direct PM_{2.5} reductions necessary for the area to attain the 2006 PM_{2.5} NAAQS by the end of 2024. Moreover, all Carl Moyer and FARMER projects are subject to detailed contract provisions that CARB may enforce against the grantee at any time during the contract term, a program feature that further supports the State's reliance on the Amended Valley Incentive Measure for emission reductions exceeding the EPA's presumptive limits.²⁷ See Response 2.

CARB's SIP submission and related support documents also indicate that the Amended Valley Incentive Measure will achieve 4.46 tpd of NO_x reductions and 0.26 tpd of PM_{2.5} reductions by 2025.²⁸ We are, therefore, approving CARB's commitments to achieve 4.46 tpd of NO_x reductions and 0.26 tpd of PM_{2.5} reductions by the beginning of 2025, thereby making these portions of the Amended Valley Incentive Measure enforceable under the CAA and creditable toward the attainment control strategy in the 2012 NAAQS Plan.²⁹ In a separate rulemaking on the 2012 NAAQS Plan, the EPA will identify the specific amounts of NO_x and PM_{2.5} emission reductions that may be attributed to the Amended Valley Incentive Measure as part of the State's control strategy for attaining the 2012 PM_{2.5} NAAQS. If those amounts of NO_x and PM_{2.5}

²⁷ 2011 Carl Moyer Guidelines, Part I, Chapter 3, Section Y ("Minimum Contract Requirements") and 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 3, Section V ("Minimum Contract Requirements"), para. 11 ("Repercussions for Nonperformance").

²⁸ CARB, "Appendix I, San Joaquin Valley Agricultural Equipment Incentive Measure, NRCS Project List," available as "Appendix I – Detailed" at <https://ww2.arb.ca.gov/resources/documents/implementation-state-sip-strategy> (last visited November 16, 2021) and also available as "ag_appx_i_detailed_021120.xlsx" in the docket for this rulemaking. The "NRCS Summary" tab of Appendix I identifies 0.64 tpd of NO_x emission reductions and 0.04 tpd of PM_{2.5} emission reductions achieved in 2025 through EQIP projects implemented by the U.S. Department of Agriculture's Natural Resources Conservation Service. Subtraction of these amounts from CARB's 2025 tonnage commitments in the Valley Incentive Measure (5.1 tpd NO_x reductions and 0.3 tpd PM_{2.5} reductions) results in 4.46 tpd of NO_x reductions (5.1 – 0.64 tpd) and 0.26 tpd of PM_{2.5} reductions (0.3 – 0.04 tpd), which CARB anticipates achieving through implementation of Carl Moyer and FARMER projects. Note that the EPA's estimate of the PM_{2.5} emission reductions achieved through Carl Moyer and FARMER projects in 2025 (0.26 tpd) is slightly higher than its estimate of the PM_{2.5} emission reductions achieved through Carl Moyer and FARMER projects in 2024 (0.24 tpd, see n. 15 *supra*) due to small differences in the projected emission reductions for 2024 and 2025 that CARB identified in Appendix I - Detailed and "Carl Moyer/FARMER Emissions Reductions Calculator," available as "Appendices H and J – Detailed" at <https://ww2.arb.ca.gov/resources/documents/implementation-state-sip-strategy>. See TSD, 28, n. 111.

²⁹ We are codifying, in the appropriate paragraph under 40 CFR section 52.220(c), CARB's commitments to achieve 4.46 tpd of NO_x reductions and 0.26 tpd of PM_{2.5} reductions by the beginning of 2025 through implementation of the relevant portions of the Valley Incentive Measure, as amended.

emission reductions exceed the EPA’s presumptive limits on the use of emission reductions from voluntary measures for SIP purposes, the EPA will, as part of that rulemaking, evaluate the SIP submission for the Amended Valley Incentive Measure to determine whether such use is justified.

III. Public Comments and EPA Responses

The EPA’s proposed action provided a 30-day public comment period. During this period, we received comments from Earthjustice objecting to our proposal.³⁰ We also received comments from 27 entities that express only support for our proposal and do not require a response.³¹ We summarize and respond to all comments from Earthjustice that pertain to the Amended Valley Incentive Measure— i.e., those portions of the measure, as amended and clarified, that pertain to implementation of Carl Moyer and FARMER projects.³²

Because we are deferring action on those portions of the Valley Incentive Measure that pertain to EQIP projects, we are not responding to comments pertaining to these portions of the measure at this time. We will respond to these comments in a subsequent rulemaking or, if we substantially revise our proposal with respect to the portions of the Valley Incentive Measure that pertain to EQIP projects, we will provide another opportunity for public comment on that revised proposal.

Comment 1: Earthjustice states that CARB and the SJVUAPCD have used promises of voluntary emission reductions supported by incentive funds to cure all number of planning and regulatory failures, and that without a detailed accounting, there is no reasonable basis for concluding that the reductions achieved in this program are surplus to reductions that have been

³⁰ Letter dated April 23, 2020, from Paul Cort, Earthjustice, to Rynda Kay, EPA, Region IX, Subject: “Docket ID No. EPA-R09-OAR-2020-0079.”

³¹ The entities that expressed support for our proposal include 17 agriculture-related trade organizations and 10 individual farmers. All of these letters are available in the docket for this rulemaking.

³² CARB Resolution 19-26 (December 12, 2019), Technical Corrections Document, and 2021 Clarification Document. All references to the Amended Valley Incentive Measure herein are to the portions of CARB Resolution 19-26 and the Technical Corrections Document that the EPA is approving (i.e., excluding those portions that pertain to EQIP projects implemented by the NRCS), as indicated in the documents in the rulemaking docket entitled “CARB Resolution 19-26, approved portions” and “Technical Corrections Document, approved portions.”

credited or assumed elsewhere. Citing the definition of “surplus” provided in the EPA’s technical support document (TSD), Earthjustice claims that the EPA has not explained how these particular emission reductions are surplus to the various other voluntary emission reductions relied upon in the SIP. For example, Earthjustice cites the emission reductions relied upon to satisfy the CAA section 185 requirements for this area (SJVUAPCD Rule 3170); the District’s assumption that mitigation funds will offset the growth in oil and gas emissions as a result to the Kern County Program environmental impact report (EIR); the District’s claim that its boiler, winery, and other rules meet minimum control requirements by requiring mitigation funds to achieve reductions in lieu of installing advanced controls (e.g., SJVUAPCD Rule 4320 and Rule 4694); and the District’s retirement of surplus emission reductions to demonstrate the equivalency of its new source review program (SJVUAPCD Rule 2201). According to Earthjustice, these voluntary incentive programs have become “an accounting shell game” and the EPA cannot deem the associated emission reductions surplus until all of the “overlapping” incentive program reductions are analyzed.

Response 1: We disagree with these claims. As a general matter, an incentive-based measure may be credited toward the control strategy in an attainment plan if the State demonstrates that the emission reductions achieved by the measure will not be “double-counted” in the same attainment plan. The EPA’s March 2018 guidance document entitled “Diesel Retrofit and Replacement Projects: Quantifying and Using Their Emission Benefits in SIPs and Conformity: Guidance for State and Local Air and Transportation Agencies,” March 2018 (“2018 Diesel Retrofits Guidance”) states that “[e]mission reductions are considered ‘surplus’ if they are not otherwise relied on to meet other applicable air quality attainment or maintenance requirements for that particular NAAQS pollutant (i.e., there can be no double-counting of emission reductions).”³³ Similarly, the EPA’s October 1997 guidance document entitled “Guidance on Incorporating Voluntary Mobile Source Emission Reduction Programs in State

³³ 2018 Diesel Retrofits Guidance, 27.

Implementation Plans (SIPs),” October 24, 1997 (“1997 VMEP”), states that “VMEP emission reductions may not be substituted for mandatory, required emission reductions,” and that “States may submit to EPA for approval any program that will result in emission reductions in addition to those already credited in a relevant attainment or maintenance plan, or used for purposes of SIP demonstrations such as conformity, rate of progress, or emission credit trading programs.”³⁴

The EPA’s intent in these guidance documents was to ensure that emission reductions achieved through implementation of voluntary programs, including incentive-based vehicle replacement programs, are not double-counted in the attainment or maintenance plan for a particular NAAQS.³⁵ Although two other EPA guidance documents cited in the EPA’s TSD state that emission reductions achieved by voluntary programs should also be surplus to other adopted state air quality programs (even those not in the relevant SIP),³⁶ these guidance documents provide only interpretive guidance and are not binding on the EPA. In the context of a control strategy to provide for attainment of a particular NAAQS, we find that an incentive-based measure need not achieve emission reductions that are surplus to all adopted state air quality programs and may, instead, be credited toward the control strategy if the State demonstrates that the measure achieves emission reductions that are not already accounted for in the particular attainment plan at issue.

Thus, to satisfy the surplus (i.e., additionality) criterion in the EPA’s longstanding guidance, the Amended Valley Incentive Measure need only be surplus to the control measures and programs that are accounted for in the attainment plan(s) in which CARB relies upon this measure. On May 10, 2019, California submitted an integrated PM_{2.5} attainment plan for the San Joaquin Valley that includes, among other things, a Serious area plan to provide for attainment of the 2006 24-hour PM_{2.5} NAAQS by 2024 (“2006 NAAQS Plan”) and a Serious area plan to

³⁴ 1997 VMEP, 6.

³⁵ That is, if the emission reductions achieved by the voluntary program have already been credited in the attainment or maintenance plan for the particular NAAQS at issue, then those emission reductions cannot be treated as “surplus” and, therefore, cannot be credited in the same attainment plan.

³⁶ 2001 EIP Guidance, section 4.1 and 2004 Emerging and Voluntary Measures Guidance, 3.

provide for attainment of the 2012 annual PM_{2.5} NAAQS by 2025 (the “2012 NAAQS Plan”) (collectively the “SJV PM_{2.5} Plan”).³⁷ The 2006 NAAQS Plan relies on the 2024 tonnage commitment in the Amended Valley Incentive Measure to achieve a portion of the emission reductions necessary for attainment of these NAAQS by the end of 2024,³⁸ and the 2012 NAAQS Plan relies on the 2025 tonnage commitment in the Amended Valley Incentive Measure to achieve a portion of the emission reductions necessary for attainment of this NAAQS by the end of 2025.³⁹ Accordingly, we have reviewed both the baseline emissions projections for off-road mobile, diesel agricultural equipment and the attainment control strategy in the SJV PM_{2.5} Plan to determine whether the emission reductions to be achieved through implementation of the Amended Valley Incentive Measure have already been credited in this attainment plan.

With respect to mobile source emissions projections, air quality plans, including the SJV PM_{2.5} Plan, rely on emissions estimates that have been derived from the use of emissions models or other emissions projection methodologies that assume certain rates of replacement of older equipment with newer equipment manufactured to meet more stringent emissions standards (i.e., fleet turnover). Use of such models and methodologies is the standard emission estimation technique, and the emissions projections made using them are generally considered sufficiently accurate for plan development purposes. The assumptions regarding fleet turnover are similar to other planning assumptions used to develop air quality plans, such as assumptions regarding population and employment growth and changes in vehicle activity. Such assumptions are not enforceable in the way that emissions limitations are enforceable. Rather, the obligation on the

³⁷ Letter dated May 9, 2019, from Richard Corey, Executive Officer, CARB, to Mike Stoker, Regional Administrator, EPA Region 9 (transmitting 2018 PM_{2.5} Plan and Valley State SIP Strategy). The SJVUAPCD developed and adopted the 2018 PM_{2.5} Plan, and CARB developed and adopted the Valley State SIP Strategy. 85 FR 44192, 44193.

³⁸ 2018 PM_{2.5} Plan, Chapter 4, Section 4.4 (“CARB Emission Reduction Commitment for the San Joaquin Valley”) and Valley State SIP Strategy, Chapter 3 (“Supplemental State Commitment from the Proposed State Measures for the Valley”). See also 85 FR 17415-17416 (March 27, 2020) (proposed rule to approve relevant portions of SJV PM_{2.5} Plan for 2006 PM_{2.5} NAAQS purposes, discussing plan’s reliance on San Joaquin Valley Agricultural Incentive Measure) and 85 FR 44192 (July 22, 2020) (final rule approving relevant portions of SJV PM_{2.5} Plan for 2006 PM_{2.5} NAAQS purposes).

³⁹ 2018 PM_{2.5} Plan, Chapter 4, Section 4.4 (“CARB Emission Reduction Commitment for the San Joaquin Valley”) and Valley State SIP Strategy, Chapter 3 (“Supplemental State Commitment from the Proposed State Measures for the Valley”).

state for plan development is to use the latest planning assumptions and most recently developed emissions models and inventories.⁴⁰

In the case of the SJV PM_{2.5} Plan, the emissions projections reflect the latest planning assumptions and emissions inventories available at the time of plan development. The Demonstration states that the projected baseline inventory for off-road mobile, diesel agricultural equipment in the 2018 PM_{2.5} Plan is based on a 2011 emissions inventory described in a CARB report entitled, “Emission Inventory for Agricultural Diesel Vehicles,” August 2018 (“Agricultural EI Report”).⁴¹ This 2011 emission inventory is based on a 2008 survey of agricultural producers, custom operators, and first processors for self-propelled diesel agricultural equipment over 25 horsepower in size, as well as data on farms and acreage from a 2007 census conducted by the U.S. Department of Agriculture (USDA).⁴² According to CARB, the 2011 emissions inventory for agricultural equipment in the 2018 PM_{2.5} Plan was derived only from base year inputs that do not account for incentive programs and does not reflect the future-year population forecast that accounts for incentive programs.⁴³ In response to the EPA’s request for clarification, CARB provided this further explanation by e-mail dated November 13, 2020:

The baseline emissions in the SJV PM_{2.5} Plan inventory were developed from the 2008 survey and 2007 USDA data on acres harvested, and include no incentives projects. All years after 2008 are projected populations and emissions reflect natural not incentivized turnover. The downward slope and reduction in emissions over time in the baseline is solely due to natural turnover, the replacement of older engines due to mechanical deterioration and the business-as-usual replacement practices.⁴⁴

⁴⁰ EPA, “Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations,” EPA-454/B-17-002, May 2017, 28 (noting that California’s prior emissions model for estimating nonroad source emissions for SIP purposes, called OFFROAD2007, has been replaced with category-specific methods for many categories). CARB uses a category-specific methodology for estimating emissions from off-road mobile, diesel agricultural equipment. See CARB’s mobile source emissions inventory website at <https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/road-documentation/msei-documentation-road>.

⁴¹ Demonstration, 59-60 and Appendix G. CARB and the EPA refer to the portion of the SJV PM_{2.5} Plan that the SJVUAPCD developed and adopted as the “2018 PM_{2.5} Plan.”

⁴² Id.

⁴³ Demonstration, 60 (referencing sections 3-5 of Agricultural EI Report for base year inputs, and sections 2 and 6-8 of Agricultural EI Report for population forecasts that include incentive programs).

⁴⁴ Email dated November 13, 2020, from Austin Hicks, CARB, to Rebecca Newhouse, EPA Region IX, Subject: “RE: 9/10 meeting: suggested agenda and request for Carl Moyer drayage project documentation.” See also email dated September 9, 2020 from Austin Hicks, CARB, to Rebecca Newhouse, EPA Region IX, Subject: “RE: Follow-up on SJV PM_{2.5} Plan ag equipment inventory question” (noting that, “[i]n the forecast, equipment populations are subject to a survival curve, developed by equipment type, equipment horsepower, and the size of the farm where it is

To illustrate, CARB provided a figure showing baseline projected NO_x emissions from 2015-2049 for three different scenarios: a projection reflecting only natural turnover, a projection including existing incentive projects, and a projection including both existing and anticipated future incentive projects.⁴⁵ The downward slopes of the two curves that include incentive projects are initially steeper than the projection reflecting only natural turnover, indicating that incentive projects result in accelerated turn-over of vehicles compared to business as usual. We find the documentation in the SJV PM_{2.5} Plan and additional information provided by CARB sufficient to confirm that the baseline emissions projections for off-road diesel agricultural equipment sources in the SJV PM_{2.5} Plan do not account for emission reductions to be achieved through implementation of the Amended Valley Incentive Measure.

The attainment control strategy in the SJV PM_{2.5} Plan also does not specifically rely on implementation of Carl Moyer or FARMER projects for SIP emission reduction credit. As explained in the EPA's proposed rule to approve relevant portions of the SJV PM_{2.5} Plan for 2006 PM_{2.5} NAAQS purposes, the majority of the NO_x emission reductions needed for attainment of the 2006 PM_{2.5} NAAQS in the SJV by 2024 come from baseline measures, none of which rely on implementation of Carl Moyer or FARMER projects.⁴⁶ For the remainder of the NO_x reductions necessary for attainment of the 2006 PM_{2.5} NAAQS by 2024, the SJV PM_{2.5} Plan relies primarily on CARB's and the District's enforceable commitments to achieve additional emission reductions, in the aggregate, through implementation of new or revised

used. Retirement trends vary from very aggressive on the largest farms (useful life of 10 years), to very slow on the smallest farms (useful life up to 40 to 50 years). Retired vehicles are modeled as being replaced by new and used equipment, again depending on equipment type, size and farm size parameters. The largest farms purchase almost exclusively new equipment, while the smallest farms purchase 10-30 year old equipment in most cases.")

⁴⁵ Email dated November 13, 2020 from Austin Hicks, CARB, to Rebecca Newhouse, EPA Region IX, Subject: "RE: 9/10 meeting: suggested agenda and request for Carl Moyer drayage project documentation."

⁴⁶ 85 FR 17382, 17410-17415 (March 27, 2020) and EPA Region IX, Technical Support Document, "EPA General Evaluation, San Joaquin Valley PM_{2.5} Plan for the 2006 PM_{2.5} NAAQS," February 2020, section V (identifying SIP-approved District rules credited in the SJV PM_{2.5} Plan's future baseline emissions estimates and attainment control strategy).

measures by the beginning of 2024.⁴⁷ The SJV PM_{2.5} Plan also relies on these same enforceable commitments by CARB and the District to achieve the additional emission reductions needed for attainment of the 2012 PM_{2.5} NAAQS by 2025.⁴⁸ The SJV PM_{2.5} Plan indicates that CARB anticipates fulfilling a portion of these emission reduction commitments through implementation of incentive funds for off-road diesel agricultural equipment,⁴⁹ but the plan does not specifically credit any incentive program with emission reductions, as the EPA has not previously approved any incentive-based control measure for SIP credit in this plan.⁵⁰ Thus, the Amended Valley Incentive Measure is the first incentive-based control measure to be approved into the SJV PM_{2.5} Plan and will achieve emission reductions beyond those already credited in this plan.

Although the EPA did not previously credit the Amended Valley Incentive Measure toward the control strategy in the SJV PM_{2.5} Plan, our approval of this measure represents progress in CARB's implementation of the SIP-approved control strategy in this plan. In addition to specific emission reduction commitments for 2024 and 2025, the SJV PM_{2.5} Plan contains commitments by CARB to bring certain defined measures, including a proposed incentive-based measure for agricultural equipment, to the Board for consideration according to the schedule set forth in the plan.⁵¹ CARB's adoption, implementation, and submission of the Valley Incentive Measure achieves a portion of CARB's aggregate NO_x and PM_{2.5} emission reduction commitments in the SIP (specifically, 4.83 and 4.46 tpd of CARB's NO_x reduction commitments and 0.24 and 0.26 tpd of CARB's PM_{2.5} reduction commitments for 2024 and 2025,

⁴⁷ 85 FR 17382, 17410-17415 and 85 FR 44192, 44198 and 44204 (July 22, 2020) (Response 3.A and Table 1). CARB's and the SJVUAPCD's aggregate tonnage commitments are codified in 40 CFR 52.220(c)(536)(ii)(A)(2) and 52.220(c)(537)(ii)(B)(3).

⁴⁸ 2018 PM_{2.5} Plan, Chapter 4, Section 4.4 ("CARB Emission Reduction Commitment for the San Joaquin Valley") and Valley State SIP Strategy, Chapter 3 ("Supplemental State Commitment from the Proposed State Measures for the Valley").

⁴⁹ 2018 PM_{2.5} Plan, Chapter 4, Table 4-8 and Table 4-9 (identifying CARB measures scheduled for action and implementation in the San Joaquin Valley) and 85 FR 17382, 17414 (Table 7, "Status of CARB Compliance with Control Measure Commitments for the San Joaquin Valley—Continued").

⁵⁰ 85 FR 44192, 44198-44199.

⁵¹ 40 CFR 52.220(c)(536)(ii)(A)(2) (referencing CARB Resolution 18-49 (October 25, 2018) and attachments) and Valley State SIP Strategy, 35-38 (identifying CARB measures scheduled for action and implementation in the San Joaquin Valley); see also 85 FR 17382, 17413-17414 (Table 7, "Status of CARB Compliance with Control Measure Commitments for the San Joaquin Valley").

respectively),⁵² and satisfies the State’s commitment to bring a proposed incentive-based measure for agricultural equipment to the Board for consideration.

Earthjustice contends that the EPA must explain how the emission reductions achieved through implementation of the Valley Incentive Measure are “surplus to the various other voluntary emission reductions relied upon in the SIP.” As stated above, however, to satisfy the surplus criterion in the EPA’s longstanding guidance, the Amended Valley Incentive Measure need only be surplus to the control measures and programs that are credited toward the attainment control strategies in the 2006 NAAQS Plan and 2012 NAAQS Plan. The SJV PM_{2.5} Plan identifies 33 District measures achieving direct PM_{2.5} and/or NO_x emissions reductions that support attainment of the PM_{2.5} NAAQS in the San Joaquin Valley.⁵³ With the exception of SJVUAPCD Rule 4320, none of the programs or regulations cited by Earthjustice (i.e., SJVUAPCD Rule 3170, mitigation funds related to the Kern County Program EIR, SJVUAPCD Rule 4694, or SJVUAPCD Rule 2201) is included among these 33 baseline measures.⁵⁴ Because these programs and regulations are not part of the attainment control strategy in either the 2006 NAAQS Plan or the 2012 NAAQS Plan, they are not relevant to our evaluation of the Amended Valley Incentive Measure.⁵⁵

SJVUAPCD Rule 4320 is identified as a baseline control measure in the SJV PM_{2.5} Plan.⁵⁶ The EPA approved Rule 4320, adopted October 16, 2008, into the California SIP on March 25, 2011, but noted that the rule did not qualify for SIP credit for attainment planning

⁵² See footnotes 16 and 28, *supra*.

⁵³ 2018 PM_{2.5} Plan, Ch. 4, Table 4-1, Table 4-2, Table 4-3, and App. C.

⁵⁴ *Id.* See also EPA, “Technical Support Document, General Evaluation, San Joaquin Valley Plan for the 2006 PM_{2.5} NAAQS,” February 2020 (“General Evaluation TSD”), section V (listing baseline measures contributing to attainment of 2006 PM_{2.5} NAAQS but not including SJVUAPCD Rule 3170, mitigation funds related to Kern County Program EIR, SJVUAPCD Rule 4694, or SJVUAPCD Rule 2201). We note also that the stated purpose of SJVUAPCD Rule 3170 is to address CAA requirements for the ozone NAAQS, not the PM_{2.5} NAAQS. *See* Rule 3170, section 1.0 (“The purpose of this rule is to satisfy requirements specified in Section 185 and Section 182(f) of the 1990 amendments to the federal Clean Air Act...”).

⁵⁵ Even if these programs and regulations rely to some extent on Carl Moyer projects, our approval of the Valley Incentive Measure does not constitute “double-counting” of SIP emission reductions because these programs and regulations are not part of the attainment control strategy in the SJV PM_{2.5} Plan.

⁵⁶ 2018 PM_{2.5} Plan, Chapter 4, Table 4-1 and Table 4-2 (identifying baseline District regulations that reduce particulate matter and NO_x emissions in the San Joaquin Valley).

purposes until the District submitted adequate supporting documentation.⁵⁷ Although the SJV PM_{2.5} Plan relies on NO_x and PM_{2.5} emission reductions from Rule 4320, which is not eligible for SIP credit at this time, the District's inclusion of this rule in the attainment control strategy for the 2006 NAAQS Plan has no material effect on our evaluation of that attainment demonstration or the Amended Valley Incentive Measure because the emission reductions attributed to Rule 4320 are de minimis. According to the District's control strategy analysis in Appendix C of the 2018 PM_{2.5} Plan, the District has attributed 0.60 and 0.21 tpd of NO_x and PM_{2.5} emission reductions, respectively, to Rule 4320 in 2024,⁵⁸ amounting to 0.3 percent of the total NO_x reductions and 3.3 percent of the total PM_{2.5} reductions necessary for attainment of the 2006 PM_{2.5} NAAQS by 2024.⁵⁹ Similarly, the District has attributed 0.64 and 0.23 tpd of NO_x and PM_{2.5} emission reductions, respectively, to Rule 4320 in 2025,⁶⁰ amounting to 0.3 percent of the total NO_x reductions and 3.6 percent of the total PM_{2.5} reductions necessary for attainment of the 2012 PM_{2.5} NAAQS by 2025.⁶¹ These amounts of emission reductions have a de minimis impact on our evaluation of the relevant attainment demonstrations and of the Amended Valley Incentive Measure. Moreover, the commenter has provided no support for a conclusion that Rule 4320 relies on implementation of Carl Moyer or FARMER projects, nor any support for a conclusion that the NO_x or PM_{2.5} emission reductions attributed to this rule in the SJV PM_{2.5}

⁵⁷ 76 FR 16696 (March 25, 2011) and EPA, Region IX Air Division, "Technical Support Document for EPA's Notice of Proposed Rulemaking for the California State Implementation Plan, San Joaquin Valley Unified Air Pollution Control District's Rule 4320, Advanced Emission Reduction Options for Boilers, Steam Generators and Process Heaters Greater than 5.0 MMbtu/hr," August 19, 2010.

⁵⁸ 2018 PM_{2.5} Plan, Appendix C, C-69 (showing 0.60 tpd NO_x reductions and 0.21 tpd PM_{2.5} reductions (winter average tpd) between 2013 base year and 2024 attainment year).

⁵⁹ The 2018 PM_{2.5} Plan shows that 202.2 tpd of NO_x reductions and 6.4 tpd of PM_{2.5} reductions from base year (2013) levels are necessary for the San Joaquin Valley to attain the 2006 PM_{2.5} NAAQS by December 31, 2024. 2018 PM_{2.5} Plan, revised App. H, Table H-6. Thus, rounding to the nearest tenth of a decimal, 0.6 tpd of NO_x reductions constitutes 0.3 percent of the necessary NO_x reductions (0.6/202.2), and 0.21 tpd of PM_{2.5} reductions constitutes 3.3 percent of the necessary PM_{2.5} reductions (0.21/6.4).

⁶⁰ 2018 PM_{2.5} Plan, Appendix C, C-69 (showing 0.64 tpd NO_x reductions and 0.23 tpd PM_{2.5} reductions (winter average tpd) between 2013 base year and 2024 attainment year).

⁶¹ The 2018 PM_{2.5} Plan shows that 207.4 tpd of NO_x reductions and 6.4 tpd of PM_{2.5} reductions from base year (2013) levels are necessary for the San Joaquin Valley to attain the 2012 PM_{2.5} NAAQS by December 31, 2025. 2018 PM_{2.5} Plan, revised App. H, Table H-6. Thus, rounding to the nearest tenth of a decimal, 0.64 tpd of NO_x reductions constitutes 0.3 percent of the necessary NO_x reductions (0.64/207.4), and 0.23 tpd of PM_{2.5} reductions constitutes 3.6 percent of the necessary PM_{2.5} reductions (0.23/6.4).

Plan include emission reductions from such incentive projects.⁶² We have no information before us indicating that either Rule 4320 or the attainment demonstration in the SJV PM_{2.5} Plan relies on any Carl Moyer or FARMER project that may also be used to satisfy the tonnage commitments in the Amended Valley Incentive Measure – i.e., that there is any double-counting of emission reductions from the same incentive projects in this plan. Accordingly, we disagree with Earthjustice’s suggestion that the Amended Valley Incentive Measure fails to meet the surplus (additionality) criterion because of the SJV PM_{2.5} Plan’s reliance on Rule 4320 as a baseline control measure.

Finally, under California State law, Carl Moyer funding is generally prohibited for any project that is required by any local, state, or federal statute, rule, regulation, memoranda of agreement or understanding, or other legally binding document in effect as of the date the grant is awarded.⁶³ CARB states in the Demonstration that all emission reductions associated with turning over older and dirtier agricultural equipment to cleaner equipment are “surplus to District and State regulations because agricultural equipment is not subject to any District or State regulation.”⁶⁴ CARB also identifies in the Demonstration those portions of the 2011 and 2017 Carl Moyer Guidelines that ensure that funding will be provided only to those projects that achieve emission reductions beyond those required by local, state, or federal requirements or other legally binding documents.⁶⁵ Because the FARMER projects relied on in the Amended

⁶² Rule 4320 requires that all emission units subject to the rule comply with one of three sets of requirements: (1) emission limits and other control requirements for NO_x, carbon monoxide (CO), and particulate matter (PM) specified in sections 5.2 and 5.4 of the rule, (2) PM control requirements in section 5.4 of the rule and a requirement to pay an annual emissions fee to the District as specified in section 5.3 of the rule, or (3) applicable “Low-use Unit” requirements in section 5.5 of the rule. SJVUAPCD Rule 4320 (adopted October 16, 2008), section 5.1. To the extent the commenter intended to argue that section 5.3.2 of Rule 4320, the provision that allows sources to pay fees in lieu of installing advanced NO_x controls, relies on implementation of Carl Moyer or FARMER projects, this comment is unsubstantiated. See *id.* at section 5.3.2 (requiring continued payment of annual fees in accordance with section 5.3.1 “until the unit either is permanently removed from use in the San Joaquin Valley Air Basin. . . or the operator demonstrates compliance with the applicable NO_x emission limits shown in Table 2”).

⁶³ Ca. HSC, Division 26, Part 5, Chapter 9, Article 3, section 44281(b) (prohibiting Carl Moyer funding for an otherwise qualified project if it is “required by any local, state, or federal statute, rule, regulation, memoranda of agreement or understanding, or other legally binding document, except that an otherwise qualified project may be funded even if the [SIP] assumes that the change in equipment, vehicles, or operations will occur, if the change is not required by a statute, regulation, or other legally binding document in effect as of the date the grant is awarded”).

⁶⁴ Demonstration, 19.

⁶⁵ Demonstration, 19-21.

Valley Incentive Measure⁶⁶ are subject to the 2017 Carl Moyer Guidelines, CARB’s rationale for finding that the identified Carl Moyer projects achieve surplus emission reductions also applies to the identified FARMER projects.⁶⁷

For all of these reasons, we find that the Amended Valley Incentive Measure achieves “surplus” emission reductions – i.e., emission reductions beyond those already credited in the SJV PM_{2.5} Plan.

Comment 2: Earthjustice states that the Valley Incentive Measure does not satisfy the enforceability requirements in section 110(a)(2)(A) of the CAA. Citing the EPA’s Memo to Docket for a rulemaking entitled “State Implementation Plans: Response to Petition for Rulemaking; Finding of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown, and Malfunction,” Earthjustice states that to be “enforceable,” a measure must be enforceable by the state, the EPA, and citizens. Earthjustice also states that the mere approval of a measure into the SIP does not convert an unenforceable provision into an enforceable one, and that the EPA’s SIP rulemaking must explain how the proposed measure can be enforced. According to Earthjustice, the EPA’s proposed rule to approve the Valley Incentive Measure has not provided a legally defensible analysis of how this rule is enforceable.

Response 2: We agree with Earthjustice’s statement that the mere approval of a measure into the SIP does not convert an unenforceable provision into an enforceable one, but we disagree with Earthjustice’s claim that CARB’s commitments in the Valley Incentive Measure are not enforceable. We explain below how the EPA and citizens may enforce the provisions of CARB’s SIP commitments in the Amended Valley Incentive Measure. We respond to Earthjustice’s more specific comments concerning enforceability in our responses to comments 3

⁶⁶ The Valley Incentive Measure relies on FARMER projects for off-road diesel agricultural equipment post-inspected from September 1, 2018 to December 31, 2023. TSD, 16.

⁶⁷ Demonstration, 43-45. See also TSD, 16-17 (noting that the EPA’s evaluation of the 2017 Carl Moyer Guidelines applies equally to the FARMER projects identified in the Valley Incentive Measure).

through 12. We note that our evaluation here is limited to CARB's commitments in the Amended Valley Incentive Measure and that the EPA will review each incentive-based control measure submitted by a state on a case-by-case basis, following notice-and-comment rulemaking, to determine whether the applicable requirements of the Act are met.

Under CAA section 110(a)(2)(A), SIPs must include enforceable emission limitations and other control measures, means or techniques necessary to meet the requirements of the Act, as well as timetables for compliance. Similarly, section 172(c)(6) provides that nonattainment area SIPs must include enforceable emission limitations and such other control measures, means or techniques as may be necessary or appropriate to provide for attainment of the NAAQS by the applicable attainment date.

Control measures, including commitments in SIPs, are enforced through CAA section 304(a), which provides for citizen suits to be brought against any "person," including a state,⁶⁸ who is alleged "to be in violation of ... an emission standard or limitation...." "Emission standard or limitation" is defined in subsection (f) of section 304.⁶⁹ As observed in *Conservation Law Foundation, Inc. v. James Busey et al.*, 79 F.3d 1250, 1258 (1st Cir. 1996):

Courts interpreting citizen suit jurisdiction have largely focused on whether the particular standard or requirement plaintiffs sought to enforce was sufficiently specific. Thus, interpreting citizen suit jurisdiction as limited to claims "for violations of specific provisions of the act or specific provisions of an applicable implementation plan," the Second Circuit held that suits can be brought to enforce specific measures, strategies, or commitments designed to ensure compliance with the NAAQS, but not to enforce the NAAQS directly. See, e.g., *Wilder*, 854 F.2d at 613-14. Courts have repeatedly applied this test as the linchpin of citizen suit jurisdiction. See, e.g., *Coalition Against Columbus Ctr. v. City of New York*, 967 F.2d 764, 769-71 (2d Cir. 1992); *Cate v. Transcontinental Gas Pipe Line Corp.*, 904 F. Supp. 526, 530-32 (W.D. Va. 1995); *Citizens for a Better Env't v. Deukmejian*, 731 F. Supp. 1448, 1454-59 (N.D. Cal.), modified, 746 F. Supp. 976 (1990).

⁶⁸ CAA section 302(e) (defining "person" to include a State or political subdivision thereof).

⁶⁹ Section 304(f) of the CAA defines "emission standard or limitation," in relevant part, to mean "a schedule or timetable of compliance" which is in effect under the Act "or under an applicable implementation plan." Section 302(p) of the Act defines "schedule and timetable of compliance" to mean "a schedule of required measures including an enforceable sequence of actions or operations leading to compliance with an emission limitation, other limitation, prohibition, or standard." Section 302(q) of the Act defines "[a]pplicable implementation plan," in relevant part, as "the portion (or portions) of the implementation plan, or most recent revision thereof, which has been approved under section 110 of [title I of the Act]. . . and which implements the relevant requirements of [the Act]."

Thus, courts have found that the citizen suit provision cannot be used to enforce the aspirational goal of attaining the NAAQS but can be used to enforce specific strategies to achieve that goal.⁷⁰

SIP control measures and commitments may also be enforced by the EPA under section 113(a)(1) of the Act, which authorizes the EPA to issue notices and compliance orders, assess administrative penalties, and bring civil actions against any “person,” including a state, who “has violated or is in violation of any requirement or prohibition of an applicable implementation plan. . . .”⁷¹

CARB’s commitments in the Amended Valley Incentive Measure are set forth on pages 7-12 of CARB Resolution 19-26 (December 12, 2019), as amended and clarified by the Technical Corrections Document and the 2021 Clarification Document.⁷² We refer to these submissions collectively as the “Amended Valley Incentive Measure.” The portions of CARB’s commitments in the Amended Valley Incentive Measure that we are approving in this rule include seven key components, as summarized below:

(1) commitments to monitor the District’s implementation of estimated numbers of Carl Moyer and FARMER projects in accordance with specified portions of the relevant program guidelines;

(2) commitments to achieve specific amounts of NO_x and PM_{2.5} emissions reductions in the San Joaquin Valley by 2024 and 2025 through implementation of the identified types of

⁷⁰ See also *Committee for a Better Arvin, et al. v. EPA*, 786 F.3d 1169, 1181 (9th Cir. 2015) (finding that California’s commitments to propose and adopt emission control measures and to achieve aggregate emission reductions are enforceable “emission standards or limitations” under the CAA).

⁷¹ CAA section 113(a)(1)-(2) (establishing EPA’s SIP enforcement authorities), section 302(e) (defining “person” to include a state or political subdivision thereof), and section 302(q) (defining “applicable implementation plan” to include the portion(s) of the implementation plan approved under CAA section 110 that implement relevant CAA requirements).

⁷² CARB Resolution 19-26, “San Joaquin Valley Agricultural Incentive Measure” (December 12, 2019), 7-12, and Executive Order S-20-031, “Adoption and Submittal of Technical Clarifications and Typographical Error Corrections to the San Joaquin Valley Agricultural Equipment Incentive Measure” (November 23, 2020) (hereafter “Technical Corrections Document”).

incentive projects or through adoption and submission of substitute control measures (hereafter “tonnage commitments”);

(3) commitments to submit reports to the EPA by May 15 each year from 2021 through 2025, each of which must include specific information about the incentive projects funded through the previous year and state CARB’s determination of whether the identified projects are expected to fulfill the NO_x and PM_{2.5} tonnage commitments (hereafter “annual demonstration reports”);

(4) commitments to make the annual demonstration reports available on CARB’s website and to the public upon request, by May 15 of each year from 2021 to 2030, and to maintain all annual demonstration reports through December 31, 2030;

(5) commitments to provide to the public, upon request, certain project-specific documents relied upon in the preparation of CARB’s annual demonstration reports, including project applications, grant contracts, and inspection-related documents;

(6) if CARB is relying on any substitute incentive projects to fulfill the tonnage commitments, commitments to confirm that all such substitute incentive projects are subject to the program criteria identified in the Amended Valley Incentive Measure and to provide specific information about each substitute project in the relevant annual demonstration report(s); and

(7) commitments to adopt and submit substitute measures or rules to the EPA by a date certain, if the EPA determines that information submitted by CARB is insufficient to demonstrate that the emission reductions necessary to fulfill the tonnage commitments for a given year will occur on schedule.⁷³

CARB states in the Demonstration that “CARB is the responsible party for enforcement of this measure and is responsible for achieving the emission reductions from this measure,” thus

⁷³ Id. We use the shorthand term “insufficiency finding” to refer to a determination by the EPA that information submitted by CARB is insufficient to demonstrate that CARB will fulfill the tonnage commitment on schedule. An insufficiency finding by the EPA triggers CARB’s obligation, under the terms of paragraphs A.5 and A.6 of CARB Resolution 19-26, to adopt and submit substitute measures or rules that address any shortfall in required emission reductions.

expressing CARB’s decision to voluntarily commit itself to fulfilling the tonnage commitment and to being held accountable for failure to fulfill this commitment.⁷⁴

Upon the EPA’s approval of these commitments into the SIP under CAA section 110, the commitments will become federally enforceable requirements of an “applicable implementation plan” as defined in CAA section 302(q). Therefore, as discussed below, both citizens and the EPA may enforce these commitments under CAA sections 304(a)(1) and 113(a)(1), respectively. We describe each enforceable component of the Amended Valley Incentive Measure below.

First, the Amended Valley Incentive Measure obligates CARB to monitor the District’s implementation of estimated numbers of Carl Moyer and FARMER projects in accordance with specified portions of the relevant program guidelines.⁷⁵ The Carl Moyer and FARMER program guidelines⁷⁶ enable CARB to carry out these oversight responsibilities by requiring, among other things, that air districts (1) maintain, for specified periods of time, all project-related documentation obtained from participating sources and through the air district’s on-site project inspections;⁷⁷ (2) make such documents available to CARB staff during CARB’s periodic

⁷⁴ Demonstration, 29 and 52.

⁷⁵ CARB Resolution 19-26, sections B and D. CARB is required under California law to monitor air district implementation of Carl Moyer projects to ensure compliance with the applicable guidelines. California Health & Safety Code (Ca. HSC) section 44291(d) (requiring CARB to “monitor district programs to ensure that participating districts conduct their programs consistent with the criteria and guidelines established by the state board and the commission pursuant to this chapter”).

⁷⁶ All FARMER projects that CARB relies on to comply with the Valley Incentive Measure are subject to the 2017 Carl Moyer Guidelines, future approved guidelines, and current and future program advisories and mail-outs, except as modified by CARB. TSD, 16-17. See also Demonstration, 43-45 and 2018 FARMER Guidelines, 17-18. Therefore, references herein to the 2017 Carl Moyer Guidelines apply to both Carl Moyer projects and FARMER projects. Should CARB revise the 2018 FARMER Guidelines at any point before May 15, 2025, it will be obligated under paragraph D.2 of CARB Resolution 19-26 to provide, in the annual demonstration report for the relevant year, a “description of any changes to the 2018 FARMER Guidelines and their related impacts on program integrity.” TSD, 17 (referencing Valley Incentive Measure, 11 (CARB Resolution 19-26, para. D.2)).

⁷⁷ The Carl Moyer Guidelines require that each implementing air district maintain a file for each funded project (a “project file”) that includes, among other things, a copy of the application, a copy of the executed project contract and any related amendments, photographic and other documentation of the baseline (replaced) engine, vehicle, or equipment, and photographic and other documentation of the new engine, vehicle, or equipment. See, e.g., 2011 Carl Moyer Guidelines, Part I, Chapter 3, Section W (“Application Evaluation and Project Selection”), para. 6; Section V (“Minimum Project Application Requirements”); Section Y (“Minimum Contract Requirements”); Section Z (“Project Pre-Inspection”); and Section AA (“Project Post-Inspection”). Air districts must generally maintain each project file for at least three years after the end of the contract term. *Id.* at Section U (“ARB Program Oversight”), para. 5.A. See also similar provisions in 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 3, Section S (“Requirements for Project Applications”), para. 2; Section T (“Application Evaluation and Project Selection”), paras. 1 and 8; Section V (“Minimum Contract Requirements”); Section W (“Project Pre-Inspection”); and Section X (“Project Post-Inspection”).

“incentive program reviews” and upon request;⁷⁸ (3) submit a certified “yearly report” to CARB containing specific information about funded projects, including information sufficient to calculate emission reductions and cost-effectiveness for source categories where required;⁷⁹ and (4) allow CARB and its designees to conduct fiscal audits and to inspect project engines, vehicles, and/or equipment and associated records during the contract term.⁸⁰ The Carl Moyer Guidelines also specifically identify types of actions on the part of the implementing air district that CARB may treat as violations of program requirements – e.g., misuse of Carl Moyer program funds to fund ineligible projects and insufficient, incomplete, or inaccurate project documentation⁸¹ -- and authorize CARB to enforce the terms of a project contract at any time during the contract term to ensure that emission reductions are achieved.⁸² If CARB fails to document in each annual demonstration report the steps it has taken to exercise these monitoring responsibilities, that failure would constitute a violation of the SIP commitment. See Response 4.

Second, the Amended Valley Incentive Measure obligates CARB to achieve, by December 31, 2023, a total of 4.83 tpd of reductions in NO_x emissions and 0.24 tpd of reductions in PM_{2.5} emissions from the 2024 baseline inventory in the 2018 PM_{2.5} Plan through implementation of (a) the Carl Moyer and FARMER projects identified in sections B and D of the commitment, (b) substitute incentive projects consistent with paragraph A.4 of the commitment, or (c) other substitute control measures adopted and submitted to the EPA in

⁷⁸ See, e.g., 2011 Carl Moyer Guidelines, Part I, Chapter 3, Section R (“Yearly Report”), para. 3.C (requiring that air districts make project-specific documents available to CARB upon request) and Section U (“ARB Program Oversight”), para. 5.A (requiring that air districts make project files readily available to CARB staff during program reviews) and 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 3, Section M (“Yearly Report”), para. 4 and Section R (“Incentive Program Review”), para. 5.

⁷⁹ See, e.g., 2011 Carl Moyer Guidelines, Part I, Chapter 3, Section R (“Yearly Report”) and 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 3, Section M (“Yearly Report”).

⁸⁰ See, e.g., 2011 Carl Moyer Guidelines, Part I, Chapter 3, Section Y (“Minimum Contract Requirements”), para. 10 and 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 3, Section V (“Minimum Contract Requirements”), para. 10.

⁸¹ 2011 Carl Moyer Guidelines, Part I, Chapter 3, Section U (“Program Non-Performance”) and 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 3, Section Q (“Program Nonperformance”).

⁸² 2011 Carl Moyer Guidelines, Part I, Chapter 3, Section Y (“Minimum Contract Requirements”) and 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 3, Section V (“Minimum Contract Requirements”), para. 11 (“Repercussions for Nonperformance”).

accordance with paragraph A.5 of the commitment.⁸³ If CARB fails to achieve these amounts of NO_x and PM_{2.5} emission reductions by December 31, 2023, through implementation of incentive projects or substitute control measures that meet the identified criteria, that failure would constitute a violation of the SIP commitment.

Similarly, the Amended Valley Incentive Measure obligates CARB to achieve, by December 31, 2024, a total of 4.46 tpd of reductions in NO_x emissions and 0.26 tpd of reductions in PM_{2.5} emissions from the 2025 baseline inventory in the 2018 PM_{2.5} Plan, through implementation of (a) the Carl Moyer and FARMER projects identified in sections B and D of the commitment, (b) substitute incentive projects consistent with paragraph A.4 of the commitment, or (c) other substitute control measures adopted and submitted in accordance with paragraph A.6 of the commitment.⁸⁴ If CARB fails to achieve these amounts of NO_x and PM_{2.5} emission reductions by December 31, 2024, through implementation of incentive projects or substitute control measures that meet the identified criteria, that failure would constitute a violation of the SIP commitment.

Third, the Amended Valley Incentive Measure obligates CARB to submit annual demonstration reports to the EPA by May 15 each year from 2021 through 2025, each of which must contain specific information about the incentive projects funded through the previous year and state CARB's determination of whether the identified projects are projected to fulfill the NO_x and PM_{2.5} tonnage commitments for 2024 and 2025.⁸⁵ If CARB fails to timely submit an annual demonstration report containing all of the information listed in paragraphs A.3, B.2 and D.2 of the Amended Valley Incentive Measure, that failure would constitute a violation of the SIP commitment.

Fourth, the Amended Valley Incentive Measure obligates CARB to make the annual demonstration reports available on CARB's website and to the public upon request, by May 15

⁸³ CARB Resolution 19-26, para. A.1.

⁸⁴ Id. at para. A.2.

⁸⁵ Id. at paras. A.3., B.2., and D.2.

of each year from 2021 to 2030, and to maintain all annual demonstration reports through December 31, 2030.⁸⁶ If CARB fails to make any of these reports available on its website or available upon request by May 15 of the relevant year, that failure would constitute a violation of the SIP commitment.

Fifth, the Amended Valley Incentive Measure obligates CARB to provide to any requestor, beginning May 15, 2021, and through 2029, certain project-specific documents relied upon in the preparation of CARB's annual demonstration reports, including project applications, grant contracts, and inspection-related documents.⁸⁷ If CARB fails to provide any of these project records within a reasonable period after receiving a request, that failure would constitute a violation of the SIP commitment.

Sixth, the Amended Valley Incentive Measure obligates CARB to provide, in each annual demonstration report, confirmation that any substitute incentive projects that it relies on to fulfill the tonnage commitments are subject to the program criteria identified in paragraph B.1 or D.1 of the commitment and to provide specific information about each substitute project.⁸⁸ If CARB fails to submit such information in any annual demonstration report that documents CARB's reliance on substitute incentive projects, that failure would constitute a violation of the SIP commitment.

Finally, if the EPA determines by August 1, 2022, that information submitted by CARB is insufficient to demonstrate that the emission reductions necessary to fulfill the 2024 tonnage commitments will occur on schedule, the Amended Valley Incentive Measure obligates CARB to adopt and submit to the EPA, no later than September 1, 2023, substitute measures or rules

⁸⁶ Id. at paras. B.3. and D.3. CARB's commitment is to submit annual demonstration reports by May 15 of each year from 2021 to 2025, and thereafter to maintain all such reports through December 31, 2030 so that they are available to the public upon request.

⁸⁷ CARB Resolution 19-26, paras. B.5 and D.5 (added by Technical Corrections Document, paras. 7 and 11).

⁸⁸ CARB Resolution 19-26, para. A.4. For example, if CARB chooses to monitor implementation of 2,500 Carl Moyer projects by 2024 (109 more than its estimate of 2,391 such projects, see para. B.1 of CARB Resolution 19-26) and to monitor 1,900 FARMER projects by 2024 (112 less than its estimate of 2,012 such projects, see para. D.1 of CARB Resolution 19-26), CARB must identify the additional 109 Carl Moyer projects as "substitute projects" in the relevant annual demonstration report(s) and provide all of the information required by para. A.4 of CARB Resolution 19-26 pertaining to these projects.

that will achieve emission reductions addressing the shortfall as expeditiously as practicable and no later than January 1, 2024.⁸⁹ If CARB fails to adopt and submit timely substitute measures or rules sufficient to address a shortfall in required emission reductions, that failure would constitute a violation of the SIP commitment.

Similarly, if the EPA determines by August 1, 2023, that information submitted by CARB is insufficient to demonstrate that the emission reductions necessary to fulfill the 2025 tonnage commitments will occur on schedule, the Amended Valley Incentive Measure obligates CARB to adopt and submit to the EPA, no later than September 1, 2024, substitute measures or rules that will achieve emission reductions addressing the shortfall as expeditiously as practicable and no later than January 1, 2025.⁹⁰ If CARB fails to adopt and submit timely substitute measures or rules sufficient to address a shortfall in required emission reductions, that failure would constitute a violation of the SIP commitment.

This series of actions mandated by the Amended Valley Incentive Measure constitutes a specific enforceable strategy for achieving specific amounts of NO_x and PM_{2.5} reductions by the beginning of 2024 and 2025. The fact that CARB may meet its SIP commitments by adopting measures that are not specifically identified in the SIP, or through one of several available techniques, does not render the requirement to achieve the emissions reductions unenforceable.⁹¹

For all of these reasons, we conclude that CARB's commitments in the Amended Valley Incentive Measure to monitor and report annually on the implementation of specific types of incentive projects, to achieve specified tonnages of NO_x and PM_{2.5} emission reductions from these projects or substitute measures, to make the annual demonstration reports and related documentation available to the public, and to adopt and submit substitute control measures where necessary to address an emission reduction shortfall identified by the EPA, constitute appropriate

⁸⁹ Id. at para. A.5.

⁹⁰ Id. at para. A.6.

⁹¹ *Citizens for a Better Environment v. Deukmejian*, 731 F. Supp. 1448, 1454-59 (N.D. Cal.) (“the basic commitment to adopt and implement additional measures, should the identified conditions occur, constitutes a specific strategy, fully enforceable in a citizens action, although the exact contours of those measures are not spelled out”), modified, 746 F. Supp. 976 (1990) (holding state and district liable for failing to satisfy SIP commitment).

means, techniques, or schedules for compliance under sections 110(a)(2)(A) and 172(c)(6) of the Act.

Comment 3: Earthjustice states that citizens and the EPA can only enforce “violations,” and that the EPA must describe what would constitute a violation of the SIP provisions being approved here. Citing section 304(a)(1) of the CAA, Earthjustice states that citizens can commence civil actions for violations of emission standards or limitations or orders issued by the EPA or a state with respect to such standards or limitations. Additionally, citing section 113(a)(1) of the Act, Earthjustice states that the EPA can enforce a violation of any requirement or prohibition of an applicable implementation plan. Earthjustice notes the EPA’s statement in the TSD that to be enforceable, program violations must be defined, and asserts that the EPA must explain where in the Valley Incentive Measure such definitions are provided. According to Earthjustice, the EPA “suggests that EPA and citizens can enforce the commitments to achieve and report on emission reductions” but does not define what exactly would constitute a violation.

Response 3: We identify in Response 2 the types of violations of the commitments that could provide the basis for an enforcement action by the EPA or by citizens under section 113(a)(1) or 304(a)(1) of the CAA, respectively. As explained in Response 2, CARB’s commitments constitute a specific enforceable strategy for achieving specific amounts of NO_x and PM_{2.5} reductions on a fixed schedule and, upon approval into the SIP, become requirements of an “applicable implementation plan” as defined in CAA section 302(q). Although the Amended Valley Incentive Measure does not specifically define potential violations of the commitments, we find that it describes each of the actions that CARB has committed to undertake in sufficient detail to enable the EPA and the public to determine whether and when a violation has occurred. Accordingly, these commitments are enforceable by citizens under CAA section 304(a)(1) and by the EPA under CAA section 113(a)(1).

Comment 4: Earthjustice states that CARB’s commitment to “monitor” District and NRCS implementation of projects in accordance with the Carl Moyer program, FARMER and

NRCS guidelines is a “vague and unenforceable commitment.” Earthjustice asks what would constitute a violation, and how one could prove that CARB is not monitoring implementation in accordance with the guidelines. Earthjustice asserts that there is no means of measuring or independently verifying compliance because there is no reporting requirement and no deadline. Additionally, Earthjustice claims that the reference to “an estimated 5,446 ... replacement projects” in CARB’s commitment “undermines the very notion that CARB even know[s] what or how many projects to monitor.” Earthjustice notes that CARB cannot receive detailed compliance reports on projects under the NRCS program and can only request “representative samples of the compliance-related documentation” used by the NRCS to compile anonymized annual reports. Earthjustice asserts that there is no way to enforce this monitoring obligation, and even if one could, there is no way for CARB to actually fulfill its obligations because it has no monitoring authority itself.

Response 4: We disagree with these comments. CARB’s commitments to monitor the District’s implementation of projects in accordance with the Carl Moyer Guidelines and FARMER Guidelines are enforceable through specific provisions in the Amended Valley Incentive Measure that require CARB to report annually on, among other things, the incentive projects it is relying on to achieve emission reductions and the actions that CARB or the District has taken to ensure that these projects comply with the applicable guidelines and program criteria. See Response 2.

Specifically, the Amended Valley Incentive Measure obligates CARB to identify, in each annual demonstration report submitted to the EPA by May 15 of each year from 2021 through 2025, those projects funded through the previous year that CARB is relying on to achieve the tonnage commitments for 2024 and 2025. CARB must identify each of these projects “by project identification number, project life and implementation date, description of both baseline and new equipment sufficient to independently calculate emission reductions, applicable incentive

program guideline, and quantified emission reductions.”⁹² Additionally, each annual demonstration report must include supporting documentation for the reported project information, describe any changes to the applicable guidelines or program criteria, and describe the implementing agency’s actions to review selected projects for compliance with these criteria.⁹³

For Carl Moyer projects, the Amended Valley Incentive Measure obligates CARB to include in each annual demonstration report a “description of any changes to the 2011 and 2017 Moyer Guidelines and their related impacts on program integrity” and “a description of CARB and the District’s actions during the prior year to monitor selected projects for compliance with Moyer Program requirements.”⁹⁴ Similarly, for FARMER projects, CARB must include in each annual demonstration report a “description of any changes to the 2018 FARMER Guidelines and their related impacts on program integrity” and “a description of CARB’s and the District’s actions during the prior year to monitor selected projects for compliance with FARMER Program requirements.”⁹⁵ Finally, for both incentive programs, if the total number of implemented projects is less than the estimated number of projects identified in paragraph B.1 or D.1 of CARB Resolution 19-26 (as applicable), CARB’s annual demonstration report must confirm that any substitute projects relied on to fulfill the tonnage commitments are subject to the program criteria identified in paragraph B.1 or D.1 and provide, for each substitute project, all of the information required in paragraph B.2.c and D.2.c.⁹⁶

⁹² CARB Resolution 19-26, para. A.3. For Carl Moyer and FARMER projects, the “project life” begins on the purchase date of the new equipment and is the period during which the project is under contract. Email dated February 13, 2020, from Austin Hicks (CARB) to Rynda Kay (EPA Region IX), Subject: “RE: Follow-up questions on the Valley Incentive Measure.” We understand the “implementation date” to mean the post-inspection date, which is the date on which the District verifies that the old equipment has been destroyed and that the new equipment has been purchased, is operational, and is the same equipment that was used in the emission reduction calculations. 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 3, Section V (“Minimum Contract Requirements”) and Section X (“Project Post-Inspection”).

⁹³ CARB Resolution 19-26, paras. B.2, C.3, and D.2.

⁹⁴ Id. at para. B.2.

⁹⁵ Id. at para. D.2.

⁹⁶ CARB Resolution 19-26, paras. B.2.d and D.2.d (requiring that CARB provide “information consistent with paragraph A.4 pertaining to the substitute incentive projects that will be implemented to achieve the emission reductions specified in [paragraphs] A.1 and A.2”). For example, if CARB chooses to monitor implementation of

These provisions ensure that CARB’s annual demonstration reports will contain both the project-specific information needed to independently calculate the emission reductions that CARB attributes to each project and the programmatic information needed to determine whether CARB and the District are taking appropriate steps to ensure that the identified projects comply with the applicable guidelines and program criteria.⁹⁷ If CARB’s annual demonstration report for a given year fails to identify the project-specific information described in paragraphs A.3, B.2, or D.2 of CARB Resolution 19-26, as amended by the Technical Corrections Document, or to document the steps it has taken to verify the District’s compliance with the applicable guidelines and program criteria, the EPA or citizens may bring an enforcement action against CARB for violating its monitoring and reporting obligations in the Amended Valley Incentive Measure.

Both CARB and the District are directly responsible for ensuring that the Carl Moyer program is implemented in accordance with State law.⁹⁸ As explained in Response 2, the Carl Moyer program guidelines enable CARB to monitor the implementing air district’s compliance with the applicable program guidelines by requiring, among other things, that air districts maintain compliance-related documentation, make such documents available to CARB staff upon request, submit certified “yearly reports” to CARB containing specific information about funded projects, and allow CARB and its designees to inspect project engines, vehicles, and/or equipment and associated records during the contract term.⁹⁹ The Carl Moyer program guidelines

2,500 Carl Moyer projects by 2024 (109 more than its estimate of 2,391 such projects, see para. B.1 of CARB Resolution 19-26) and to monitor 1,900 FARMER projects by 2024 (112 fewer than its estimate of 2,012 such projects, see para. D.1 of CARB Resolution 19-26), CARB must identify the additional 109 Carl Moyer projects as “substitute projects” in the relevant annual demonstration report(s) and provide all of the information required by paragraph A.4 of CARB Resolution 19-26 pertaining to these projects. Only incentive projects subject to the specific guidelines and program criteria referenced in paragraphs B.1 or D.1 of the Valley Incentive Measure qualify for use as “substitute projects.”

⁹⁷ For Carl Moyer projects, the 2017 Carl Moyer Guidelines specifically require that air districts audit at least five percent of active projects or 20 active projects (whichever is less), including any audits conducted following unsatisfactory annual reporting. 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 3, Section AA (“Air District Audit of Projects”), para. 1.

⁹⁸ Ca. HSC section 44291(d) (requiring CARB to “monitor district programs to ensure that participating districts conduct their programs consistent with the criteria and guidelines established by the state board and the commission pursuant to this chapter”). See also 2011 Carl Moyer Guidelines, Part I, Chapter 1 (“Program Overview”) and 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 1 (“Program Overview”).

⁹⁹ See footnotes 76-79, *supra*.

also specifically identify types of actions on the part of the implementing air district that CARB may treat as program violations and authorize CARB to enforce the terms of a project contract.¹⁰⁰ If CARB fails to document in each annual demonstration report the steps it has taken to exercise these monitoring responsibilities, that failure would constitute a violation of the SIP commitment.

As Earthjustice correctly notes, we stated in our TSD that the Valley Incentive Measure obligates CARB to monitor an “estimated” total of 5,446 off-road diesel agricultural equipment replacement projects in accordance with the Carl Moyer, FARMER, and NRCS programs and their respective guidelines.¹⁰¹ Earthjustice claims that this reference to an “estimated” number of projects “undermines the very notion that CARB even know[s] what or how many projects to monitor.” This comment, however, appears to be based on a misunderstanding of the purpose of these provisions of the commitment. CARB’s primary obligations under the Amended Valley Incentive Measure are to (1) monitor District implementation of estimated numbers of incentive projects in accordance with specified portions of the relevant program criteria, (2) fulfill specific NO_x and PM_{2.5} tonnage commitments through implementation of the identified projects or through adoption and submission of substitute control measures, (3) submit to the EPA, each year from 2021 to 2025, a publicly available annual demonstration report that includes specific information about the projects funded through the previous year, (4) maintain and provide to the public, upon request, the documentation that CARB has relied on to develop the annual demonstration reports, and (5) adopt and submit substitute measures or rules by specific dates, if the EPA determines that information submitted by CARB is insufficient to demonstrate that the identified projects will fulfill the tonnage commitments. See Response 2.

¹⁰⁰ See footnotes 80 and 81, *supra*.

¹⁰¹ TSD, 4. Because we are approving only those portions of the Valley Incentive Measure that pertain to Carl Moyer and FARMER projects, the total estimated number of projects that CARB must monitor under para. A.3.a of CARB Resolution 19-26 is 4,403 (5,446 – 1,043), and the total estimated number of projects that CARB must monitor under para. A.3.b of the resolution is 3,980 (4,723 – 743). CARB Resolution 19-26, paras. A.3 and C.2.

The Amended Valley Incentive Measure does not obligate CARB to ensure implementation of any particular number of projects. The purpose of the project number estimates in paragraphs B.1 and D.1 (and the total project number estimates provided in paragraph A.3) of CARB Resolution 19-26 is to establish reasonable limits on the extent to which CARB may change the list of projects relied upon from year to year, while allowing CARB some flexibility to substitute listed projects with different project types,¹⁰² provided all projects identified in the annual demonstration report satisfy the applicable program criteria¹⁰³ and achieve, in the aggregate, the tonnages of emission reductions identified in paragraphs A.1 and A.2 of CARB Resolution 19-26. In this way, the project number estimates enable the EPA and the public to hold CARB responsible for overseeing substantial numbers of projects under both the Carl Moyer and FARMER programs and ensuring that its selected mix of projects ultimately fulfills the tonnage commitments by 2024 and 2025.¹⁰⁴ We therefore disagree with Earthjustice’s claim that the project number estimates “undermine” CARB’s ability to carry out its monitoring obligation.

Additionally, as explained in Response 2, CARB is obligated to achieve 4.83 and 4.46 tpd of NO_x emission reductions by December 31, 2023 and December 31, 2024, respectively, and to achieve 0.24 and 0.26 tpd of PM_{2.5} emission reductions by December 31, 2023 and December 31, 2024, respectively, either through implementation of the identified agricultural equipment replacement projects or through substitute measures adopted and submitted in accordance with the deadlines specified in paragraphs A.5 and A.6 of CARB Resolution 19-26.¹⁰⁵ Thus, although CARB is not specifically obligated to ensure that certain numbers of

¹⁰² See fn. 87, *supra* (explaining how CARB may substitute a small number of Carl Moyer projects for FARMER projects).

¹⁰³ CARB Resolution 19-26, para. A.4.

¹⁰⁴ The project number estimates also enabled the EPA and the public to evaluate the tonnage commitments in the Valley Incentive Measure and to determine whether CARB could reasonably be expected to achieve the necessary emission reductions through the identified project types. TSD, 26-28 (explaining the EPA’s conclusion that it is “reasonable to expect that the implementation of projects under these three incentive programs will achieve the full amount of NO_x and PM_{2.5} emission reductions that CARB has committed to achieve in the Valley Incentive Measure”).

¹⁰⁵ CARB Resolution 19-26, paras. A.1, A.2, A.5, and A.6.

incentive projects are implemented or to achieve the required NO_x or PM_{2.5} emission reductions through incentive projects, CARB is obligated to monitor substantial numbers of the specified types of incentive projects for the purpose of determining whether those projects will achieve the necessary amounts of NO_x and PM_{2.5} emission reductions by December 31, 2023, and December 31, 2024, in the San Joaquin Valley. If CARB fails to adequately document its bases for finding that the identified incentive projects have fulfilled the tonnage commitments, CARB must adopt and submit substitute measures sufficient to address the shortfall.¹⁰⁶

Comment 5: Earthjustice states that nothing in CARB's commitment to achieve 5.9 tpd of NO_x and 0.3 tpd of PM_{2.5} emission reductions by December 31, 2023, or its commitment to achieve 5.1 tpd of NO_x and 0.3 tpd of PM_{2.5} by December 31, 2024, specifies where these emission reductions must come from or where they must occur. Earthjustice claims that nothing specifies whether these reductions must be the result of some action by the agencies or merely the result of favorable economic conditions, and that CARB has relied on the latter in the past to claim compliance with similar "commitments." Earthjustice further claims that there is no way for the EPA or citizens to look at the entire emissions inventory for the San Joaquin Valley on December 31, 2024, and determine whether CARB has achieved this emission reduction, and that even if overall emissions increase between 2019 and 2022, CARB could still claim that but for some unspecified reason, the total NO_x emissions would have been 5.9 tpd higher. Earthjustice argues that because there is no way to prove that CARB has not achieved the NO_x and PM_{2.5} reductions, the commitment fails to define any possible violation and is not practicably enforceable.

Response 5: We identify in Response 2 the types of violations of the commitments that may provide the basis for an enforcement action by the EPA or by citizens under section 113(a)(1) or 304(a)(1) of the CAA, respectively. As explained in Response 2, CARB's commitments constitute a specific enforceable strategy for achieving specific amounts of NO_x

¹⁰⁶ Id.

and PM_{2.5} reductions on a fixed schedule and, upon approval into the SIP, become requirements of an “applicable implementation plan” as defined in CAA section 302(q). Accordingly, these commitments are enforceable by citizens under CAA section 304(a)(1) and by the EPA under CAA section 113(a)(1).

Earthjustice’s characterization of CARB’s commitments is incorrect in several respects. First, with respect to CARB’s commitments to achieve specific amounts of NO_x and PM_{2.5} reductions by December 31, 2023, and by December 31, 2024, Earthjustice claims incorrectly that the commitments do not specify where these emission reductions must come from or where they must occur. The Amended Valley Incentive Measure specifies that CARB must achieve emission reductions through implementation of one or both of the following types of measures: (1) incentive projects implemented in accordance with specified program criteria, and/or (2) substitute control measures adopted and submitted to the EPA by specified deadlines.¹⁰⁷ It also makes clear that these emission reductions must occur in the San Joaquin Valley.¹⁰⁸

Second, Earthjustice claims incorrectly that nothing in the commitment “specifies whether [the emission reductions] must be the result of some action by the agencies or merely the result of favorable economic conditions, which is exactly how CARB has claimed compliance with similar ‘commitments’ in the past.” By its terms, the Amended Valley Incentive Measure obligates CARB to “achieve” the identified emission reductions by December 31, 2023, and December 31, 2024, either by confirming implementation of identified incentive projects in accordance with specific guidelines and program criteria or by adopting and submitting to the

¹⁰⁷ CARB Resolution 19-26, paras. A.1, A.2, A.5, and A.6.

¹⁰⁸ Id. at A.1, A.2 (requiring CARB to achieve emission reductions from specified baseline inventories “in the 2018 PM_{2.5} Plan, as detailed in the Valley State SIP Strategy...”). The 2018 PM_{2.5} Plan and Valley State SIP Strategy together constitute California’s Serious area plan for attaining the 2006 PM_{2.5} NAAQS in the San Joaquin Valley. 85 FR 44192 (July 22, 2020). See also CARB Resolution 19-26, 3 (“CARB staff prepared the [Valley Incentive Measure] to demonstrate that it meets the U.S. EPA SIP measure requirements to achieve emission reductions from the incentivized turnover of agricultural equipment in the [San Joaquin] Valley”). The 2018 PM_{2.5} Plan and Valley State SIP Strategy also contain California’s Serious area plan for attaining the 2012 PM_{2.5} NAAQS in the San Joaquin Valley. CARB Resolution 19-1 (January 24, 2019) (adopting 2018 PM_{2.5} Plan and 2016 Moderate Plan for San Joaquin Valley), CARB Resolution 18-49 (October 25, 2018) (adopting Valley State SIP Strategy), and CARB, “Staff Report, Review of the San Joaquin Valley 2018 Plan for the 1997, 2006, and 2012 PM_{2.5} Standards,” release date December 21, 2018 (“CARB Staff Report”), 5-7.

EPA substitute control measures that achieve equivalent emission reductions by December 31, 2023, or December 31, 2024, as applicable. In the interpretative statements preceding these commitments and in the Demonstration, CARB recognizes its obligation to “provide a publicly-enforceable commitment to achieve the reductions”¹⁰⁹ and confirms that the Amended Valley Incentive Measure is enforceable because it “ensur[es] that actions required of project grantees are independently verifiable, program violations are defined, those liable can be identified, penalties or corrective action may occur and citizens have access to all emissions-related information obtained from participating sources.”¹¹⁰ Nowhere in the Amended Valley Incentive Measure or in CARB’s interpretative statements does CARB indicate that favorable economic conditions may suffice to achieve the aggregate tonnage commitments.

We note that in prior EPA actions approving aggregate tonnage commitments from CARB, the EPA has rejected claims that “actual emission decreases” resulting from an economic recession or other circumstances may count towards meeting the commitments and made clear that the only permissible means for achieving the required emission reductions is through notice-and-comment rulemaking procedures leading to the adoption and implementation of enforceable control measures.¹¹¹

Third, Earthjustice suggests, incorrectly, that the EPA and citizens would have to look at the entire emissions inventory for the San Joaquin Valley on December 31, 2024 (or December 31, 2023), to determine whether CARB has achieved the emission reductions required in the Valley Incentive Measure. For the reasons stated in this response and earlier in Response 2, it is not necessary to review an emissions inventory to determine whether CARB has achieved the

¹⁰⁹ CARB Resolution 19-26, 3 (“Whereas, for incentive-based measures, U.S. EPA also requires the State to... provide a publicly-enforceable commitment to achieve the reductions”).

¹¹⁰ Id. at 4-6 (whereas clauses concerning enforceability of emission reductions achieved through Carl Moyer and FARMER projects). Similarly, CARB states in the Demonstration that “the District and CARB will report and track to ensure that the Valley Incentive Measure... delivers the reductions needed,” that “[t]he public will be able to calculate the emission reductions using widely available methods and assumptions documented in this report, and in a manner that can be replicated,” and that “U.S. EPA and the public will be able to determine whether emission reductions attributed to a project adequately covers the period for which those reductions are credited in a SIP...” Demonstration, 4.

¹¹¹ See, e.g., 76 FR 69896, 69914-16 (November 9, 2011) (partially approving and partially disapproving PM_{2.5} attainment demonstration for San Joaquin Valley).

required reductions. The Amended Valley Incentive Measure obligates CARB to provide, in each annual demonstration report submitted to the EPA from May 2021 through May 2025, detailed information about each incentive project that CARB is relying on to achieve the necessary emission reductions, including identification and descriptions of both the old (replaced) and new equipment sufficient to independently calculate emission reductions.¹¹² Each of these annual demonstration reports must be readily available to the public upon submission to the EPA and remain available on CARB's website through December 31, 2030.¹¹³ If CARB's 2024 annual demonstration report (which is due May 15, 2024) fails to demonstrate that the identified projects have achieved 4.83 tpd of NO_x emission reductions and 0.24 tpd of PM_{2.5} emission reductions from the 2024 baseline inventory in the 2018 PM_{2.5} Plan, citizens may sue CARB for violating its SIP commitment. Likewise, if CARB's 2025 annual demonstration report (due May 15, 2025) fails to demonstrate that the identified projects have achieved 4.46 tpd of NO_x emission reductions and 0.26 tpd of PM_{2.5} emission reductions from the 2025 baseline inventory in the 2018 PM_{2.5} Plan, citizens may sue CARB for violating its SIP commitment. The tonnage commitments remain enforceable even if the EPA has not made an insufficiency determination in accordance with paragraph A.5 or A.6 of CARB Resolution 19-26. See Response 7 and Response 9.

Additionally, if the EPA determines by August 1, 2022, that information submitted by CARB is insufficient to demonstrate that the emission reductions necessary to fulfill the 2024 tonnage commitments will occur on schedule, CARB must adopt and submit to the EPA, no later than September 1, 2023, substitute measures or rules that will achieve emission reductions addressing the shortfall as expeditiously as practicable and no later than January 1, 2024.¹¹⁴ Likewise, if the EPA determines by August 1, 2023, that information submitted by CARB is insufficient to demonstrate that the emission reductions necessary to fulfill the 2025 tonnage

¹¹² CARB Resolution 19-26, paras. A3, B.2 and D.2.

¹¹³ Id. at paras. B.3 and D.3.

¹¹⁴ Id. at para. A.5.

commitments will occur on schedule, CARB must adopt and submit to the EPA, no later than September 1, 2024, substitute measures or rules that will achieve emission reductions addressing the shortfall as expeditiously as practicable and no later than January 1, 2025.¹¹⁵ Any such substitute control measure must be adopted following state rulemaking procedures through which the EPA and the public may track the State's progress in achieving the requisite emissions reductions. We expect CARB to make clear during any such rulemaking that it is proposing the identified measure or rule for purposes of submission to the EPA consistent with its commitment in the Amended Valley Incentive Measure.¹¹⁶ If, following an insufficiency finding by the EPA, CARB fails to adopt and submit substitute control measures that fully address the identified shortfall in required emission reductions by the relevant deadline, citizens may sue CARB for violating its SIP commitment.

For all of these reasons, we disagree with Earthjustice's claim that the Valley Incentive Measure fails to define any possible violation and is not practicably enforceable.

Comment 6: Earthjustice states that the implication of the rule is that the required emission reductions will come from the replacement of agricultural equipment but that nothing in the measure commits CARB to achieve any such replacements. Earthjustice claims that this rule is "a transparent attempt to undermine the entire framework of SIP enforceability" and that the measure is nothing more than "an open-ended commitment to figure out how to reduce emissions, with no actual enforceable commitment to action." Earthjustice states that the purpose of the SIP program is to compel states to identify the specific, enforceable actions they will take to reduce emissions, and that it is not enough for the state to merely promise to reduce emissions somehow and offer that citizens can sue the state if it fails.

¹¹⁵ Id. at para. A.6.

¹¹⁶ See EPA, Memorandum dated November 22, 2011, from Janet McCabe, Deputy Assistant Administrator, EPA Office of Air and Radiation, to Air Division Directors, EPA Regions 1-10, Attachment B ("Guidelines to States Agencies for Preparing the Public Notices for State Implementation Plan (SIP) Revisions") (noting that state public notices must state that the regulation or document at issue will be submitted to the EPA for approval into the SIP).

Response 6: We agree with Earthjustice’s statement that the purpose of the SIP program is to compel states to identify specific, enforceable actions to reduce emissions, but we disagree with the claim that the Valley Incentive Measure is an “open-ended commitment” with no enforceable commitment to action.

As explained in Response 2 and Response 4, the Amended Valley Incentive Measure obligates CARB to (1) monitor District implementation of estimated numbers of incentive projects in accordance with specified portions of the relevant program criteria, (2) fulfill specific NO_x and PM_{2.5} tonnage commitments through implementation of the identified projects or through adoption and submission of substitute control measures, (3) submit to the EPA, each year from 2021 to 2025, an annual demonstration report that includes specific information about the projects funded through the previous year, (4) make each annual demonstration report publicly available and available upon request, (5) provide to the public, upon request, certain project-specific documents relied upon in the preparation of CARB’s annual demonstration reports, including project applications, grant contracts, and inspection-related documents, and (6) adopt and submit substitute measures or rules by specific dates, if the EPA determines that information submitted by CARB is insufficient to demonstrate that the identified projects will fulfill the tonnage commitments.¹¹⁷

Numerous courts interpreting citizen suit jurisdiction under section 304 of the CAA have held that suits can be brought to enforce “specific measures, strategies, or commitments designed to ensure compliance with the NAAQS,” though not to enforce the NAAQS directly.¹¹⁸ As explained in Response 2 and Response 4, CARB’s commitments constitute a specific enforceable strategy for achieving specific amounts of NO_x and PM_{2.5} reductions on a fixed schedule and, upon approval into the SIP, become requirements of an “applicable implementation plan” as defined in CAA section 302(q). Accordingly, these commitments are

¹¹⁷ CARB Resolution 19-26 and Technical Corrections Document.

¹¹⁸ See, e.g., *Conservation Law Foundation, Inc. v. James Busey, et. al.*, 79 F. 3d 1250, 1258 and internal citations (1st Cir. 1996).

enforceable by citizens under CAA section 304(a)(1) and by the EPA under CAA section 113(a)(1).

We also disagree with Earthjustice's suggestion that CARB's commitments are unenforceable because CARB has not specifically committed to "achieve" or implement any replacements of agricultural equipment. As explained in Response 2 and Response 4, CARB's tonnage commitments must be met through implementation of one or both of the following types of measures: (1) agricultural equipment replacement projects implemented in accordance with specified program criteria, and/or (2) substitute control measures adopted and submitted to the EPA by specified deadlines.¹¹⁹ If CARB fails to achieve the specified amounts of NO_x and PM_{2.5} emission reductions by December 31, 2023, or December 31, 2024, through implementation of agricultural equipment replacement projects or substitute control measures, that failure would constitute a violation of the SIP commitment. See Response 2. The fact that CARB may meet its SIP commitments by adopting measures that are not specifically identified in the SIP, or through one of several available techniques, does not render the requirement to achieve the emissions reductions unenforceable.¹²⁰

Comment 7: Earthjustice states that the central obligation of this program is CARB's commitment to rectify shortfalls, but that this obligation is triggered only if the EPA makes a determination. Earthjustice asserts that, without some mechanism for forcing the EPA to make such a determination, citizens cannot enforce CARB's obligation. Furthermore, Earthjustice argues, even if the EPA were to make such a determination, there is no way for the EPA and citizens to prove that CARB had failed to rectify the shortfall because there is no explanation of what action CARB must take. According to Earthjustice, CARB need only point to "substitute

¹¹⁹ CARB Resolution 19-26, paras. A.1, A.2, A.5, and A.6.

¹²⁰ *Citizens for a Better Environment v. Deukmejian*, 731 F. Supp. 1448, 1454-59 (N.D. Cal.) ("the basic commitment to adopt and implement additional measures, should the identified conditions occur, constitutes a specific strategy, fully enforceable in a citizens action, although the exact contours of those measures are not spelled out"), modified, 746 F. Supp. 976 (1990) (holding state and district liable for failing to satisfy SIP commitment).

measures or rules” but these do not need to be new measures, and “CARB can claim that other regulated sectors reduced emissions more than anticipated for whatever reason.”

Response 7: We agree with Earthjustice’s statement that CARB’s commitment to rectify shortfalls is dependent on an EPA determination but disagree with the claim that this obligation cannot be enforced by citizens. Additionally, to the extent Earthjustice intended to assert that an insufficiency determination by EPA is necessary to enable citizens to enforce the central obligation in CARB’s commitment – i.e., the tonnage commitment – this assertion is incorrect.

As explained in Response 2 and Response 4, the Amended Valley Incentive Measure obligates CARB to (1) monitor District implementation of estimated numbers of incentive projects in accordance with specified portions of the relevant program criteria, (2) fulfill specific NO_x and PM_{2.5} tonnage commitments through implementation of the identified projects or through adoption and submission of substitute control measures, (3) submit to the EPA, each year from 2021 to 2025, an annual demonstration report that includes specific information about the projects funded through the previous year, (4) make each annual demonstration report publicly available and available upon request, (5) provide to the public, upon request, certain project-specific documents relied upon in the preparation of CARB’s annual demonstration reports, including project applications, grant contracts, and inspection-related documents, and (6) adopt and submit substitute measures or rules by specific dates, if the EPA determines that information submitted by CARB is insufficient to demonstrate that the identified projects will fulfill the tonnage commitments.¹²¹ The central obligation in these commitments is to fulfill specific NO_x and PM_{2.5} tonnage commitments on a fixed schedule, and the other components of the commitments are designed to ensure that the EPA and citizens can hold CARB responsible for achieving these emission reductions by the specified dates.

Earthjustice correctly notes that the commitment to rectify shortfalls (in paragraphs A.5 and A.6 of CARB Resolution 19-26) is triggered only if the EPA determines that information

¹²¹ CARB Resolution 19-26 and Technical Corrections Document.

submitted by CARB is insufficient to demonstrate that the identified projects will fulfill the tonnage commitments. Earthjustice incorrectly claims, however, that there is no way for the EPA or citizens to prove that CARB had failed to rectify a shortfall identified by the EPA because there is no explanation of what action CARB must take. As explained in Response 2 and Response 5, if the EPA determines by August 1, 2022, that information submitted by CARB is insufficient to demonstrate that the emission reductions necessary to fulfill the 2024 tonnage commitments will occur on schedule, CARB must adopt and submit to the EPA, no later than September 1, 2023, substitute measures or rules that will achieve emission reductions addressing the shortfall as expeditiously as practicable and no later than January 1, 2024.¹²² Likewise, if the EPA determines by August 1, 2023, that information submitted by CARB is insufficient to demonstrate that the emission reductions necessary to fulfill the 2025 tonnage commitments will occur on schedule, CARB must adopt and submit to the EPA, no later than September 1, 2024, substitute measures or rules that will achieve emission reductions addressing the shortfall as expeditiously as practicable and no later than January 1, 2024.¹²³

Contrary to Earthjustice’s assertion, CARB cannot satisfy this commitment by simply claiming “that other regulated sectors reduced emissions more than anticipated for whatever reason.” By its terms, the commitment is to “adopt and submit to U.S. EPA. . . substitute measures or rules” – i.e., new or revised prohibitory control measures – that achieve the necessary emission reductions by the specified deadline. Any such substitute control measure must be adopted following state rulemaking procedures through which the EPA and the public may track the State’s progress in achieving the requisite emissions reductions.¹²⁴ We expect that CARB will make clear during any such rulemaking that it is proposing the identified measure or rule for purposes of submission to the EPA consistent with its commitment in the Amended

¹²² CARB Resolution 19-26 at para. A.5.

¹²³ Id. at para. A.6.

¹²⁴ The substitute measures or rules would, therefore, be enforceable by the EPA and citizens under the CAA upon approval into the SIP.

Valley Incentive Measure.¹²⁵ If, following an insufficiency finding by the EPA, CARB fails to adopt and submit prohibitory control measures that fully address the identified shortfall in required emission reductions by the relevant deadline, citizens may sue CARB for violating its SIP commitment.

Even if the EPA does not make an insufficiency finding, citizens may independently enforce the tonnage commitments against CARB by reviewing CARB's annual demonstration reports. As explained in Response 5, the Amended Valley Incentive Measure obligates CARB to provide, in each annual demonstration report submitted to the EPA from May 2021 through May 2025, detailed information about each incentive project that CARB is relying on to achieve the necessary emission reductions, including descriptions of both the old (replaced) and new equipment sufficient to independently calculate emission reductions.¹²⁶ Each of these annual demonstration reports must be readily available to the public on CARB's website upon submission to the EPA and remain available through December 31, 2030.¹²⁷ If CARB's 2024 annual demonstration report (which is due May 15, 2024) fails to demonstrate that the identified projects have achieved 4.83 tpd of NO_x emission reductions and 0.24 tpd of PM_{2.5} emission reductions from the 2024 baseline inventory in the 2018 PM_{2.5} Plan, and CARB has not submitted substitute control measures to address the shortfall, citizens may sue CARB for violating its SIP commitment. Likewise, if CARB's 2025 annual demonstration report (due May 15, 2025) fails to demonstrate that the identified projects have achieved 4.46 tpd of NO_x emission reductions and 0.26 tpd of PM_{2.5} emission reductions from the 2025 baseline inventory in the 2018 PM_{2.5} Plan, and CARB has not submitted substitute control measures to address the shortfall, citizens may sue CARB for violating its SIP commitment. Thus, the tonnage

¹²⁵ See EPA, Memorandum dated November 22, 2011, from Janet McCabe, Deputy Assistant Administrator, EPA Office of Air and Radiation, to Air Division Directors, EPA Regions 1-10, Attachment B ("Guidelines to States Agencies for Preparing the Public Notices for State Implementation Plan (SIP) Revisions") (noting that state public notices must state that the regulation or document at issue will be submitted to the EPA for approval into the SIP).

¹²⁶ CARB Resolution 19-26, paras. A3, B.2, C.3, and D.2.

¹²⁷ Id. at paras. B.3, C.4., and D.3.

commitments remain enforceable even if the EPA has not made an insufficiency finding in accordance with paragraph A.5 or A.6 of CARB Resolution 19-26. See Response 9.

Comment 8: Earthjustice states that CARB’s obligation to “provide publicly available annual demonstration reports” is a “throw away requirement.” According to Earthjustice, while it might be possible to show that CARB did not provide a report, the contents of the report are so vague that any document would likely pass muster. Earthjustice asserts that although the State must monitor compliance and project whether projects will achieve reductions on time, there are no consequences, for example, if CARB finds noncompliance is rampant or there is no possibility that projects will achieve emission reductions on time.

Response 8: We disagree with Earthjustice’s assertion that the annual demonstration reports are “throw away” requirements and that “the contents of the report are so vague that any document would likely pass muster.” As discussed in Response 4, the Amended Valley Incentive Measure obligates CARB to include the following information in each annual demonstration report that it submits to the EPA by May 15 of each year from 2021 through 2025: (1) specific information about the projects funded through the previous calendar year that CARB is relying on to fulfill the tonnage commitment;¹²⁸ (2) a description of any changes to the applicable guidelines and related impacts on program integrity; (3) a description of CARB’s and the District’s actions to monitor selected Carl Moyer and FARMER projects for compliance with contract requirements; and (4) a determination of whether the identified projects are projected to fulfill the NO_x and PM_{2.5} tonnage commitments in the San Joaquin Valley by the relevant deadlines.¹²⁹ CARB’s supporting analysis in the Demonstration further describes the project-specific information for Carl Moyer and FARMER projects that CARB intends to include in each annual demonstration report including, among other things, the project life, post-inspection

¹²⁸ CARB must identify each project that it is relying upon to achieve emission reductions “by project identification number, project life and implementation date, description of both baseline and new equipment sufficient to independently calculate emission reductions, applicable incentive program guideline, and quantified emission reductions.” CARB Resolution 19-26, paras. A.3.a.i and A.3.b.i.

¹²⁹ Id. at paras. B.2 and D.2.

date,¹³⁰ vehicle identification number (VIN), equipment serial number, activity information (i.e., annual hours of operation), percentage of operations occurring in California and in the San Joaquin Valley area, equipment and engine make and model, engine horsepower and tier, vehicle fuel type, and engine emission level (i.e., emission factor).¹³¹

These provisions ensure that CARB's annual demonstration reports will contain both the project-specific information needed to independently calculate the emission reductions that CARB attributes to each project and the programmatic information needed to determine whether CARB and the District are taking appropriate steps to ensure that the identified projects comply with the applicable program criteria. If CARB's annual demonstration report for a given year fails to provide any of the information described in paragraphs A.3, B.2, or D.2 of CARB Resolution 19-26, as amended by the Technical Corrections Document, the EPA or citizens may bring an enforcement action against CARB for violating its reporting obligations. See Response 4.

We also disagree with Earthjustice's comments about CARB's monitoring obligations in the Valley Incentive Measure and its claim that there are no consequences if CARB finds that noncompliance is rampant or that the identified projects cannot achieve emission reductions on time. As we explained in Response 4, CARB is obligated to monitor the District's implementation of estimated numbers of incentive projects in accordance with specified portions of the relevant program criteria for purposes of determining whether those projects will fulfill specific NO_x and PM_{2.5} tonnage commitments by 2024 and 2025. Additionally, CARB must report annually on the actions that both CARB and the District have taken to monitor Carl Moyer and FARMER projects for compliance with contract requirements. If the EPA determines that information submitted by CARB is insufficient to demonstrate that it will fulfill a particular

¹³⁰ The "post-inspection date" is the date on which the District verifies that the old equipment has been destroyed and that the new equipment has been purchased, is operational, and is the same equipment that was used in the emission reduction calculations. 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 3, Section X ("Project Post-Inspection").

¹³¹ Demonstration, 24-29 (discussing Carl Moyer project information) and 48-52 (discussing FARMER project information).

tonnage commitment on schedule, CARB must adopt and submit substitute measures to the EPA that address any shortfall in emission reductions by specified dates. For example, if the EPA finds, during its review of the annual demonstration reports for 2021 and 2022, that a substantial number of identified projects have not complied with contract terms, or that the total number of projects is insufficient to ensure that CARB will meet its NO_x and PM_{2.5} tonnage commitments by December 31, 2023, the EPA would make an insufficiency finding and thus trigger CARB's obligation to adopt and submit substitute control measures. If, following such an insufficiency finding by the EPA, CARB fails to adopt and submit substitute control measures that fully address the identified shortfall in required emission reductions by the relevant deadline, both the EPA and citizens may sue CARB for violating its SIP commitment. See Response 2. Any insufficiency finding that the EPA makes would be available to the public upon request and available on the EPA's website at <https://www.epa.gov/sips-ca>.

Even if the EPA does not make an insufficiency finding, citizens may verify whether CARB has met the tonnage commitment by independently reviewing CARB's annual demonstration reports, and thereby enforce the tonnage commitment directly. As explained in Response 5, the Amended Valley Incentive Measure obligates CARB to provide detailed information in each annual demonstration report and to make each of these reports readily available to the public on CARB's website or available upon request. If CARB's 2024 annual demonstration report (which is due May 15, 2024) fails to demonstrate that the identified projects have achieved 4.83 tpd of NO_x emission reductions and 0.24 tpd of PM_{2.5} emission reductions from the 2024 baseline inventory in the 2018 PM_{2.5} Plan, and CARB has not submitted substitute control measures to address the shortfall, citizens may sue CARB for violating its SIP commitment. For example, if citizens find, upon review of the 2024 annual demonstration report and related project documents, that emission reductions have not occurred because a substantial number of identified projects have not complied with contract terms, or that the total number of projects is insufficient to meet CARB's NO_x and PM_{2.5} tonnage

commitments by December 31, 2023, citizens may sue CARB for violating its SIP commitment.

See Response 5.

All Carl Moyer and FARMER projects are subject to detailed contract provisions that must, among other things, specify the repercussions for noncompliance with contract requirements.¹³² Under the 2011 and 2017 Carl Moyer Guidelines, each project contract must include: (1) the name and contact information of the grantee; (2) specified timeframes for “project completion” (the date the project “post-inspection” confirms that the project has become operational) and “project implementation” (the project life used in the project cost-effectiveness calculation); (3) detailed information on both baseline and new equipment, including documentation adequate to establish historical annual usage; (4) requirements for the grantee to maintain the equipment according to the manufacturer’s specifications for the life of the project; (5) annual reporting requirements; (6) a provision authorizing the District, CARB, and their designees to conduct fiscal audits and to inspect the equipment and associated records during the contract term; (7) requirements to maintain and retain project records for at least three years after contract expiration; (8) repercussions for noncompliance; and (9) a statement that CARB is authorized to enforce the terms of the contract at any time during the contract term to ensure that emission reductions are obtained.¹³³ These project contracts, in addition to other project-specific records, will be available to the public upon request beginning May 15, 2021, and through 2029,¹³⁴ thereby enabling the public to verify the project-specific information provided in CARB’s annual demonstration reports.

¹³² Cal. Health & Safety Code section 44288(d) (“Funds shall be awarded in conjunction with the execution of a contract that obligates the state board or a participating district to make the grant and obligates the grantee to take the actions described in the grant application”), 2011 Carl Moyer Guidelines, Part 1, Chapter 3, Section Y (“Minimum Contract Requirements”), para. 11 and 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 3, Section V (“Minimum Contract Requirements”), para. 11.

¹³³ 2011 Carl Moyer Guidelines, Part 1, Chapter 3, Section Y (“Minimum Contract Requirements”) and Chapter 9, Section C (“Project Criteria”), para. 2.E (requiring documentation showing ownership by the grantee for the previous 24 months), 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 3, Section V (“Minimum Contract Requirements”) and Chapter 5, Section D (“Project Criteria”), para. 4(E)(1) (requiring documentation showing ownership by the grantee for the previous 24 months).

¹³⁴ CARB Resolution 19-26, paras. B.5 and D.5 (added by Technical Corrections Document, paras. 7 and 11) (requiring that CARB provide to any requestor “all documents relied upon in the preparation of any annual

Additionally, both CARB and the District are authorized to “seek any remedies available under the law for noncompliance with Carl Moyer program requirements and nonperformance with the contract,” including cancelling the contract and recapturing program funds.¹³⁵ Should CARB determine that the District’s oversight and enforcement of the program is insufficient, CARB may also recapture funds granted to the District that have not yet been awarded to approved projects.¹³⁶

These provisions of the 2011 and 2017 Carl Moyer Guidelines, together with CARB’s commitments in the Amended Valley Incentive Measure, enable the EPA and the public to independently verify the emission reductions attributed to each incentive project that CARB has identified in its annual demonstration reports to demonstrate compliance with the tonnage commitment. For all of these reasons, we disagree with Earthjustice’s claim that CARB’s reporting obligations in the Valley Incentive Measure are insufficient to ensure that emission reductions will occur in a timely manner.

Comment 9: Earthjustice asserts that the absence of defined violations makes independent verification impossible, and that although CARB says it is “monitoring” implementation, neither the EPA nor citizens can independently verify or prove otherwise. Earthjustice claims that an even more fundamental problem around verification is that the emission reductions to be achieved, in theory, will come from projects under the Carl Moyer and FARMER programs that neither the EPA nor citizens can independently verify, and from the NRCS program that no one other than NRCS can verify. Earthjustice states that measures that preclude verification and enforcement by the EPA and citizens do not meet the enforceability requirements of the Act.

demonstration report and available in the relevant project file, including: project applications, grant contracts, inspection-related documents (including photographic documentation of baseline engine destruction), and any available audit-related documentation and annual grantee reports”).

¹³⁵ 2011 Carl Moyer Guidelines, Part 1, Chapter 3, Section Y (“Minimum Contract Requirements”), para. 11 and 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 3, Section V (“Minimum Contract Requirements”), para. 11.

¹³⁶ 2011 Carl Moyer Guidelines, Part 1, Chapter 3, Section T (“Program Non-Performance”), para. 4. and 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 3, Section Q (“Program Nonperformance”), para. 3.

Response 9: We disagree with Earthjustice’s claim that neither the EPA nor citizens can independently verify whether CARB is monitoring implementation of the identified incentive projects. CARB’s commitment to monitor District implementation of projects in accordance with the 2011 and 2017 Carl Moyer Guidelines is enforceable through specific reporting provisions in the Amended Valley Incentive Measure that require CARB to report annually on, among other things, the incentive projects it is relying on to achieve emission reductions and the actions that CARB and the District have taken to ensure that these projects comply with the contracts issued in accordance with the applicable Carl Moyer Guidelines. See Response 2 and Response 4.

We also disagree with Earthjustice’s assertion that projects relied on in the Valley Incentive Measure cannot be independently verified by the EPA or the public. As explained in Response 4 and Response 8, the Amended Valley Incentive Measure obligates CARB to provide, in each annual demonstration report, detailed information about each incentive project funded through the previous year that CARB is relying on to achieve the required NO_x and PM_{2.5} emission reductions, including descriptions of both baseline and new equipment sufficient to independently calculate emission reductions.¹³⁷ Consistent with these obligations, CARB has submitted an Excel spreadsheet populated with detailed project-specific information for both baseline and new equipment sufficient to independently calculate emission reductions for all Carl Moyer and FARMER projects completed as of July 26, 2019, which we refer to as “Detailed Spreadsheet HJ.”¹³⁸ We explain below how the emission reductions for each project may be independently verified, based on the project data provided in Detailed Spreadsheet HJ and the quantification methodologies provided in the 2011 and 2017 Carl Moyer Guidelines.

¹³⁷ CARB Resolution 19-26, para. A.3.

¹³⁸ CARB, “Carl Moyer/FARMER Emissions Reductions Calculator” (“Detailed Spreadsheet HJ”), available as “Appendices H and J – Detailed” at <https://ww2.arb.ca.gov/resources/documents/implementation-state-sip-strategy> (last visited November 16, 2021). This spreadsheet is also available as “ag_appx_h_j_detailed_021120.xlsx” at www.regulations.gov under docket number EPA-R09-OAR-2020-0079. We understand that CARB will include, in each annual demonstration report submitted to the EPA beginning May 15, 2021, similar spreadsheets providing detailed information about each project that CARB relies on to fulfill its tonnage commitments in the Amended Valley Incentive Measure. The EPA is currently reviewing the first annual demonstration report that CARB submitted to EPA on May 14, 2021, including the associated project spreadsheets. This report is available at <https://ww2.arb.ca.gov/resources/documents/implementation-state-sip-strategy> and available as “2021 Annual Demonstration Report” at www.regulations.gov under docket number EPA-R09-OAR-2020-0079.

For Carl Moyer and FARMER projects, the accuracy of the project data provided in each annual demonstration report may be verified through independent review of specific documents that grantees and the District must maintain in accordance with the Carl Moyer Guidelines, all of which will be available for public review in accordance with paragraphs B.5 and D.5 of CARB Resolution 19-26.¹³⁹ First, actions required of grantees under the 2011 and 2017 Carl Moyer Guidelines are independently verifiable through (1) pre-project and post-project on-site inspections (with photographic documentation) that the District and/or CARB must carry out pursuant to the applicable guidelines, and (2) documents that each grantee is required to maintain and/or submit to the District in accordance with detailed contract provisions.

For example, the 2017 Carl Moyer Guidelines require, among other things, that (1) all project applications include documentation of existing engine usage in previous years (e.g., miles traveled, hours operated, or fuel consumed per year); (2) that the District conduct a “pre-inspection” of each application deemed eligible for funding, to verify information regarding the baseline equipment; (3) that the District conduct a “post-inspection” of each funded project to verify destruction of the baseline engine through photographic or video evidence, and record, among other things, information regarding the new equipment as needed to provide a basis for emission calculations and to ensure contract enforceability; and (4) that the District’s project files include all required “pre-inspection” and “post-inspection” documentation, including photographic documentation of the engine, vehicle, or equipment information (e.g., a legible serial number and/or other identifying markings) and photographic evidence of the scrapped or destroyed engine.¹⁴⁰

¹³⁹ Paragraphs B.5 and D.5 of CARB Resolution 19-26 (added by paragraphs 7 and 11 of the Technical Corrections Document) obligate CARB to provide to the public upon request, for Carl Moyer and FARMER projects, beginning 15, 2021 and through 2029: “all documents relied upon in the preparation of any annual demonstration report and available in the relevant project file, including: project applications, grant contracts, inspection-related documents (including photographic documentation of baseline engine destruction), and any available audit-related documentation and annual grantee reports.”

¹⁴⁰ 2017 Carl Moyer Program Guidelines, Volume I, Part 1, Chapter 3, Section T (“Application Evaluation and Project Selection”), para. 3, Section W (“Project Pre-Inspection”), and Section X (“Project Post-Inspection”). See also 2011 Carl Moyer Program Guidelines, Part 1, Chapter 3, Section W (“Application Evaluation and Project Selection”), para. 3, Section Z (“Project Pre-Inspection”), and Section AA (“Project Post-Inspection”).

Second, the 2017 Carl Moyer Guidelines specifically define the required elements of each contract and the types of actions that constitute violations of such contracts. Specifically, each project contract must include: (1) the name and contact information of the grantee; (2) specified timeframes for “project completion” and “project implementation”; (3) detailed information on baseline and new equipment, including documentation adequate to establish historical annual usage; (4) requirements for equipment maintenance; (5) annual reporting requirements; (6) authorization for the District, CARB, and their designees to conduct fiscal audits and equipment and associated records inspection; (7) requirements to retain project records after contract expiration; and (8) repercussions for contract noncompliance, including cancellation of the contract and recapture of program funds.¹⁴¹ See Response 8.

Third, the 2017 Carl Moyer Guidelines require that all grantees submit specific types of project records to the District and also require the District to maintain such records for specified periods of time. Specifically, each contract executed by the District must require the grantee to maintain project records for at least three years after contract expiration, and to submit annual or biennial reports to the District. Additionally, the District must keep each “project file” for a minimum of three years after the end of the contract term. A “project file” generally includes a copy of the application, the contract, a completed pre- and post-inspection form, photographs of the destroyed engine, and the annual reports submitted by the grantee.¹⁴²

These requirements of the 2017 Carl Moyer Guidelines, which are substantively identical to similar provisions in the 2011 Carl Moyer Guidelines, ensure that the District will maintain project-specific documents sufficient for the EPA and the public to verify the accuracy of

¹⁴¹ 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 3, Section V (“Minimum Contract Requirements”) and Chapter 5, Section D (“Project Criteria”), para. 4(E)(1) (requiring documentation showing ownership by the applicant for the previous 24 months). See also 2011 Carl Moyer Guidelines, Part 1, Chapter 3, Section Y (“Minimum Contract Requirements”) and Chapter 9, Section C (“Project Criteria”), para. 2(E) (requiring documentation showing ownership by the grantee for the previous 24 months).

¹⁴² 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 3, Section T (“Application Evaluation and Project Selection”), para. 1, Section V (“Minimum Contract Requirements”), para. 1, Section W (“Project Pre-Inspection”), para. 4, Section X (“Project Post-Inspection”), para.1, and Section Z (“Grantee Annual Reporting”), para. 3. See also 2011 Carl Moyer Guidelines, Part 1, Chapter 3, Section W (“Application Evaluation and Project Selection”), para.1, Section Y (“Minimum Contract Requirements”), para.1, Section Z (“Project Pre-Inspection”), para.4, Section AA (“Project Post-Inspection”), para.1, and Section CC (“Grantee Annual Reporting”), para. 3.

CARB’s emission reduction calculations for the Carl Moyer and FARMER projects listed in each annual demonstration report. Specifically, the EPA and the public may verify CARB’s emission reduction calculations not only by independently calculating project-specific emission reductions using the quantification methodologies provided in the 2017 Carl Moyer Guidelines and the project data provided in the annual demonstration report, but also by confirming the accuracy of the project data provided in CARB’s annual demonstration reports, through independent review of the project-specific documents that the District must maintain under the 2011 and 2017 Carl Moyer Guidelines (e.g., the project contract and associated pre-inspection and post-inspection documentation). All of these project-specific documents will be available for public review in accordance with paragraphs B.5 and D.5 of CARB Resolution 19-26.¹⁴³ Accordingly, the EPA and citizens can obtain the information necessary to quantify and verify the emission reductions that CARB attributes to Carl Moyer and FARMER projects to fulfill the tonnage commitments in the Amended Valley Incentive Measure.

To demonstrate how the public can quantify and verify the emission reductions identified in each annual demonstration report, we randomly selected three of the projects listed in Appendix H and Appendix J of the Demonstration¹⁴⁴ and independently calculated the emission reductions for these projects based on the data inputs provided in Detailed Spreadsheet HJ and the relevant quantification methodologies in the 2011 and 2017 Carl Moyer Guidelines. The projects that we randomly selected from Appendix H and Appendix J of the Demonstration are identified in Table 1.

Table 1. Carl Moyer and FARMER projects, and selected project information, from Detailed Spreadsheet HJ (see also Demonstration, Appendix H and Appendix J).

Equipment Identifier	Function Vocation	Applicable Program Guideline	Post-Inspection date	Baseline Engine	NOx Reductions	PM _{2.5} Reductions
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¹⁴³ Technical Corrections Document, paras. 7 and 11.

¹⁴⁴ Demonstration, Appendix H (“San Joaquin Valley Agricultural Equipment Incentive Measure, Carl Moyer Project List”), Appendix J (“San Joaquin Valley Agricultural Equipment Incentive Measure, FARMER Project List”), and Detailed Spreadsheet HJ, available at <https://ww2.arb.ca.gov/resources/documents/implementation-state-sip-strategy>, link entitled “Appendices H and J – Detailed” (last visited November 16, 2021) (also available as “ag_appx_h_j_detailed_021120.xlsx” at www.regulations.gov under docket number EPA-R09-OAR-2020-0079).

				Model Year	(tons per day)	(tons per day)
C-60539-1-A1	Agricultural tractor replacement	2018 FARMER (2017 Carl Moyer Guidelines)	7/15/2019	2005	0.000643	0.0000297
C-49610-1A	Agricultural tractor replacement	2017 Carl Moyer Guidelines	1/23/19	1992	0.000747	0.0000625
C-27026-1A	Agricultural tractor replacement	2011 Carl Moyer Guidelines	10/26/15	1996	0.00217	0.0000724

We independently calculated the emission reductions for the selected projects using the data inputs included in Detailed Spreadsheet HJ and provided our analysis in a memorandum to file dated February 27, 2021, which we refer to as the “EPA Calculation Memo.”¹⁴⁵ Our calculations replicated the emission reductions as reported by CARB for all three projects.

Although we calculated emission reductions for only three randomly selected projects from Appendix H and Appendix J, the availability of the project information in Excel format allows for the verification of emission reductions from all projects relied on in the Amended Valley Incentive Measure in a fraction of the time it would take to perform manual calculations. Use of Excel to perform these emission reduction calculations becomes especially advantageous (in lieu of manual calculation) as the number of implemented projects increases each year. The EPA Calculation Memo provides more information on how to use Excel to calculate emission reductions from these projects.¹⁴⁶

Additionally, at our request, CARB submitted project-specific documents, including the project application, baseline engine usage records, grant contract, documentation of destruction,

¹⁴⁵ EPA, Memorandum dated February 27, 2021, from Rebecca Newhouse, EPA Region IX, to File, Subject: “Sample emission reduction calculations for selected Carl Moyer and FARMER off-road, heavy, mobile, diesel agricultural equipment replacement projects” (hereafter “EPA Calculation Memo”).

¹⁴⁶ Id.

and pre- and post-inspection photographs, for two of the projects listed in Table 1 (Carl Moyer project number C-27026-1A and FARMER project number C-60539-1-A1).¹⁴⁷ We reviewed the information contained in these project records and confirmed that it is generally consistent with the information provided in Detailed Spreadsheet HJ for these two projects.¹⁴⁸

In sum, the EPA and the public can verify the emission reductions that CARB has attributed to each Carl Moyer and FARMER project it is relying on to achieve the NO_x and PM_{2.5} tonnage commitment in the Amended Valley Incentive Measure by doing the following: (1) for each project identified in an annual demonstration report (or for a random selection of such projects), reviewing the project-specific documents that CARB must provide upon request, to verify the accuracy of the project data provided in CARB's annual demonstration report, and (2) independently calculating the emission reductions for each project identified in the annual demonstration report (or for a random selection of such projects), based on the relevant project data (e.g., annual hours of operation, baseline and new engine model year, engine tier, horsepower, and project life) and the applicable quantification methodologies in the 2011 and 2017 Carl Moyer Guidelines. Thus, CARB's commitments concerning the annual demonstration reports and related project documents, together with detailed inspection, recordkeeping and reporting requirements in the 2011 and 2017 Carl Moyer Guidelines, enable the EPA and the public to verify the emission reductions achieved by each project that CARB is relying on to fulfill its tonnage commitment in the Amended Valley Incentive Measure.

Comment 10: Earthjustice asserts that the goal of the rule is to remove the requirement for enforceability against the actual sources by making CARB responsible for the emission reductions. According to Earthjustice, the EPA appears to admit that the actual emissions reductions achieved through these various incentives do not satisfy the Act's criteria for

¹⁴⁷ E-mail dated March 11, 2021, from Austin Hicks, CARB, to Rynda Kay, EPA Region IX, Subject: RE: Requesting project documentation for Valley Incentive Measure projects; 1 of 2 C-27026-1-1A and e-mail dated March 11, 2021, from Austin Hicks, CARB, to Rynda Kay, EPA Region IX, Subject: RE: Requesting project documentation for Valley Incentive Measure projects; 2 of 2 C-60539-1-1A.

¹⁴⁸ EPA, Memorandum dated April 26, 2021, from Rynda Kay, EPA Region IX, to File, Subject: "Review of CARB project documentation."

enforceability but claim that the defect can be “cured by inventing an umbrella commitment for CARB to fill any shortfall.” Earthjustice claims that the “commitment to make up the difference, however, does not in fact cure the unenforceability of the reductions credit[ed] toward that commitment,” and that the emission reductions that CARB commits to achieve are measured only by CARB and the District (and NRCS), and cannot be verified by anyone else. Earthjustice states that if CARB claims that it has satisfied its 5.9 tpd commitment because the incentive programs worked, there is no way for the EPA or others to confirm that this is true. Earthjustice states that the EPA and citizens cannot compel the grant recipients to support the data submitted to CARB, the District, or NRCS, and that the EPA and citizens must trust that these agencies have done their due diligence in verifying the data themselves – a task that Earthjustice claims is not really in the interest of these agencies because they do not want to be on the hook for making up any shortfall. Likewise, according to Earthjustice, if CARB claims that its substitute measures reduce emissions by whatever the shortfall, there is nothing in the rule that ensures anyone else could verify that claim.

Response 10: We disagree with the commenter’s assertion that the emission reductions committed to by CARB cannot be verified by anyone other than CARB and the District. As explained in Response 2 and Response 4, CARB has committed to submit annual demonstration reports containing detailed project data that enables the public and the EPA to independently calculate the emission reductions from each identified project. Additionally, the 2011 and 2017 Carl Moyer Guidelines¹⁴⁹ require that grantees submit, and that the District maintain, project documents sufficient for the EPA and the public to verify the accuracy of the project data provided in CARB’s annual demonstration reports (e.g., the project contract and associated pre-inspection and post-inspection documentation). See Response 9.

¹⁴⁹ All FARMER projects that CARB relies on to comply with the Amended Valley Incentive Measure are subject to the 2017 Carl Moyer Guidelines, future approved guidelines, and current and future program advisories and mail-outs, except as modified by CARB. Demonstration, 43-45 and 2018 FARMER Guidelines, 17-18; see also TSD, 16-17.

Although we agree with the commenter that neither the EPA nor the public can compel grantees to provide additional data or documentation, the 2011 and 2017 Carl Moyer Guidelines include a number of requirements to ensure that project-specific information is supported by the grantee with additional documentation, and that equipment-specific information supplied by the grantee is verified by the implementing agency (in this case, the SJVUAPCD). For example, the 2017 Carl Moyer Guidelines require that old equipment be inspected by the implementing agency with corresponding written and photographic documentation, confirming 1) that the equipment is in usable condition, and 2) that the equipment-specific information provided by the grantee such as the make, model, horsepower, and usage meter reading (referred to as a “pre-inspection”) is correct.¹⁵⁰ The 2017 Carl Moyer Guidelines also require that new equipment be inspected after purchase and contract execution to confirm the equipment’s make, model, horsepower, and usage meter reading, with corresponding written and photographic documentation (referred to as a “post-inspection”).¹⁵¹ District staff or an approved salvage yard must take photographs of the destroyed engine and, if a salvage yard verifies engine destruction, the salvage yard must provide that documentation to the air district within ten business days of dismantling the equipment.¹⁵² The implementing agency must include these photographs in the project file.¹⁵³ Additionally, the 2017 Carl Moyer Guidelines require grantees to submit documentation that establishes historical annual usage of the old equipment and confirms ownership for the past two years.¹⁵⁴ Contract provisions require grantees to submit annual reports that include annual usage, and time operated in California, for the new equipment until contract expiration.¹⁵⁵ As explained in Response 9, the public has access to all underlying documentation for each Carl Moyer project in accordance with paragraphs B.5 and D.5 of CARB Resolution 19-

¹⁵⁰ 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 3, Section W (“Project Pre-Inspection”).

¹⁵¹ Id. at Section X (“Project Post-Inspection”).

¹⁵² 2017 Carl Moyer Guidelines, Volume I, Part 1, Chapter 5, Section D (“Project Criteria”).

¹⁵³ Id. at Chapter 3, Section X (“Project Post-Inspection”), para. 1.

¹⁵⁴ Id. at Section V (“Minimum Contract Requirements”) and Chapter 5, Section D (“Project Criteria”).

¹⁵⁵ Id. at Section Z (“Grantee Annual Reporting”), paras. 1 and 2.

26.¹⁵⁶ We therefore disagree with Earthjustice’s claim that the EPA and the public must “trust that these agencies have done their due diligence in verifying the data themselves.”

We also disagree with the commenter’s assertion that there is no way to verify the emission reductions achieved by the substitute measures that CARB must adopt if the EPA projects an emission reduction shortfall. Specifically, as explained in Response 2 and Response 5, if the EPA determines by August 1, 2022, that information submitted by CARB is insufficient to demonstrate that the emission reductions necessary to fulfill the 2024 tonnage commitments will occur on schedule, CARB must adopt and submit to the EPA, no later than September 1, 2023, substitute measures or rules that will achieve emission reductions addressing the shortfall as expeditiously as practicable and no later than January 1, 2024.¹⁵⁷ Likewise, if the EPA determines by August 1, 2023, that information submitted by CARB is insufficient to demonstrate that the emission reductions necessary to fulfill the 2025 tonnage commitments will occur on schedule, CARB must adopt and submit to the EPA, no later than September 1, 2024, substitute measures or rules that will achieve emission reductions addressing the shortfall as expeditiously as practicable and no later than January 1, 2025.¹⁵⁸ Any such substitute control measure must be adopted following state rulemaking procedures through which the EPA and the public may track the State’s progress in achieving the requisite emissions reductions and comment on the State’s emission reduction analyses. We expect CARB to make clear during any such rulemaking that it is proposing the identified measure or rule for purposes of submission to the EPA consistent with its commitment in the Amended Valley Incentive Measure.¹⁵⁹ If, following an insufficiency finding by the EPA, CARB fails to adopt and submit prohibitory

¹⁵⁶ Technical Corrections Document, paras. 7 and 11 (requiring that CARB provide to any requestor “all documents relied upon in the preparation of any annual demonstration report and available in the relevant project file, including: project applications, grant contracts, inspection-related documents (including photographic documentation of baseline engine destruction), and any available audit-related documentation and annual grantee reports”).

¹⁵⁷ CARB Resolution 19-26, para. A.5.

¹⁵⁸ *Id.* at para. A.6.

¹⁵⁹ See EPA, Memorandum dated November 22, 2011, from Janet McCabe, Deputy Assistant Administrator, EPA Office of Air and Radiation, to Air Division Directors, EPA Regions 1-10, Attachment B (“Guidelines to States Agencies for Preparing the Public Notices for State Implementation Plan (SIP) Revisions”) (noting that state public notices must state that the regulation or document at issue will be submitted to the EPA for approval into the SIP).

control measures that fully address the identified shortfall in required emission reductions by the relevant deadline, citizens may sue CARB for violating its SIP commitment.

Comment 11: Earthjustice asserts that the EPA's approach "separates the emission reduction obligation from the emitter and makes the (theoretically) liable party in charge of determining compliance." Earthjustice claims that neither the EPA nor citizens can independently verify compliance with the emission reduction commitment and that CARB is given the ability to deem itself in compliance with no possibility for others to challenge that determination.

Response 11: For the reasons provided in Response 2 through Response 10, we disagree with these claims.

Comment 12: Earthjustice states that the absence of defined violations is most apparent when trying to describe what penalties could be assessed or what corrective action could be compelled by a court. For example, Earthjustice asks, if CARB were found in violation of the 5.9 tpd commitment, would CARB be subject to daily penalties under CAA section 113 until it achieved that reduction, or could it be compelled to adopt some replacement measure by the court? Earthjustice also asks how such a suit in equity would be handled under the Eleventh Amendment to the Constitution; whether the commitment to rectify the shortfalls upon an EPA determination negates any such court intervention; and whether the EPA is the arbiter of whether the substitute measures are adequate. If so, Earthjustice asserts, there is effectively no penalty for violating the 5.9 tpd commitment, and the only recourse is to repeatedly challenge the EPA for arbitrarily letting CARB and the District fail to clean the air, which is not subject to remedies under CAA section 113. Earthjustice further asks what the penalty is for failing to monitor implementation or for inadequate reporting, and how a court would determine days of violations. According to Earthjustice, these are not practicably enforceable commitments because the violations are not actually defined. Earthjustice claims that the EPA cannot explain exactly how a violation of these various commitments could be proven and enforced, and what the judicial

remedy would be for citizens bringing an enforcement action. According to Earthjustice, this is why no one has ever been able to enforce similar state emission reduction commitments in the past.

Response 12: We disagree with Earthjustice's claim that "there is effectively no penalty for violating the 5.9 tpd commitment" and that the only recourse for such a violation is for the public to "repeatedly challenge the EPA for arbitrarily letting CARB and the District fail to clean the air, which is not subject to remedies under CAA section 113." As explained in Response 2 and Response 5, CARB's commitments constitute a specific enforceable strategy for achieving specific amounts of NO_x and PM_{2.5} emission reductions on a fixed schedule and, upon approval into the SIP, become requirements of an "applicable implementation plan" as defined in CAA section 302(q). Accordingly, these commitments are enforceable by citizens under CAA section 304(a)(1) and by the EPA under CAA section 113(a)(1). CARB has also clearly expressed its decision to voluntarily commit itself to fulfilling the tonnage commitment and to being held accountable for failure to fulfill this commitment.¹⁶⁰

The EPA has approved enforceable SIP commitments in the past and courts have enforced these commitments against states that failed to comply with them.¹⁶¹ As the Second Circuit has stated, "a plan, once adopted by a state and approved by the EPA, becomes controlling and must be carried out by the state," and the U.S. district courts are "obligated, upon a showing that the state has violated the plan, to issue appropriate orders for its enforcement."¹⁶²

Several district courts have, in response to citizen suits brought under CAA section 304(a), issued orders to enforce SIP-approved commitments by states to adopt and implement

¹⁶⁰ Demonstration, 29 and 52 (stating that "CARB is the responsible party for enforcement of this measure and is responsible for achieving the emission reductions from this measure").

¹⁶¹ See, e.g., *American Lung Ass'n of N.J. v. Kean*, 670 F. Supp. 1285 (D.N.J. 1987), *aff'd*, 871 F.2d 319 (3rd Cir. 1989); *NRDC, Inc. v. N.Y. State Dept. of Env. Cons.*, 668 F. Supp. 848 (S.D.N.Y. 1987); *Citizens for a Better Env't v. Deukmejian*, 731 F. Supp. 1448, *recon. granted in par.*, 746 F. Supp. 976 (N.D. Cal. 1990); *Coalition for Clean Air v. South Coast Air Quality Mgt. Dist.*, No. CV 97-6916-HLH (C.D. Cal. Aug. 27, 1999). Further, if a state fails to fulfill its commitments, the EPA may make a finding of failure to implement the SIP under CAA section 179(a), which starts an 18-month period for the state to correct the non-implementation before mandatory sanctions apply.

¹⁶² *Friends of the Earth v. Carey*, 535 F.2d 165, 169, 173 (2d Cir. 1976). See also *Natural Resources Defense Council v. N.Y. Department of Environmental Conservation*, 668 F. Supp. 848, 852 (S.D.N.Y. 1987).

specific types of control measures. In *American Lung Ass’n of N.J. v. Kean*, 670 F. Supp. 1285 (D.N.J. 1987), *aff’d*, 871 F.2d 319 (3rd Cir. 1989), the court found New Jersey liable for failure to comply with SIP-approved commitments to implement seven specific ozone-control strategies identified in the submitted plan. Rejecting New Jersey’s argument that its SIP compelled it only to study the feasibility of the seven strategies and to implement only those strategies that it found feasible, the court concluded that the text of the SIP “manifests an intention on the part of New Jersey to commit itself to the schedule” that plaintiffs alleged New Jersey had violated – i.e., a schedule for proposing regulations, promulgating final regulations, and implementing those final regulations through proper enforcement.¹⁶³ The court granted plaintiff’s motion for partial summary judgment on the issue of New Jersey’s liability under the CAA for failure to comply with its SIP and ordered the parties to submit proposed timetables for New Jersey’s compliance with its SIP. In the second phase of trial, the court adopted New Jersey’s proposed schedule for promulgation and implementation of regulations, which had been approved by the EPA and plaintiffs.¹⁶⁴ On appeal brought by petroleum industry trade associations, the Court of Appeals for the Third Circuit affirmed the district court’s order.¹⁶⁵

In *Natural Resources Defense Council, Inc. v. N.Y. State Dept. of Env. Cons.*, 668 F. Supp. 848 (S.D.N.Y. 1987), the court held that New York had violated its SIP-approved commitments to study and implement specific strategies for reducing volatile organic compound (VOC) emissions from four major source categories. Rejecting New York’s arguments that summary judgment on liability would be inappropriate because of its reasonable efforts to implement the SIP, unavoidable technical difficulties, and the failure of other state and federal environmental agencies that share implementation responsibilities to take timely action, the court found that “[t]he very fact that the New York SIP has been violated mandates a finding of

¹⁶³ 670 F. Supp. 1285, 1290.

¹⁶⁴ 871 F. 2d 319.

¹⁶⁵ *Id.* at 327 (noting that the “scheduling order entered by the district court is an equitable order, made within the ambit of the district court's discretion to fashion appropriate remedies”).

liability, regardless of the reasons for the violation.”¹⁶⁶ The court granted plaintiff’s motion for partial summary judgment on the issue of New York’s liability under the CAA for failure to comply with its SIP and, following the parties’ submissions of proposed implementation schedules, issued a detailed scheduling order including specific deadlines for New York to complete studies, propose and adopt regulations, and require full compliance with the adopted regulations for each of the four VOC source categories.¹⁶⁷

In *Coalition for Clean Air v. South Coast Air Quality Mgt. Dist.*, No. CV 97–6916–HLH (C.D. Cal. Aug. 27, 1999), the court held that the South Coast Air Quality Management District (SCAQMD) had violated its SIP-approved commitments by failing to adopt and implement 31 of 32 control measures identified in its ozone SIP. The SCAQMD provided numerous reasons for its failure to adopt and implement these measures, including its review of updated emission inventories showing that the emission of some source categories were drastically lower than the SIP had assumed, the unavailability of technologies that the SCAQMD had previously assumed would be developed, and the excessive costs of certain measures compared with the pollution to be reduced. The court rejected these arguments, finding that “[o]nce liability is established, the District Court is required by the Act to issue an injunction to compel compliance with the SIP” and that “[m]istakes or failures in factual assumptions must be considered by the EPA, not by the Court, whose duty it is to enforce the SIP as written.”¹⁶⁸ The court issued an injunction establishing specific deadlines for the SCAQMD to adopt and implement the 31 control measures.

Thus, if a district court found CARB in violation of the 4.83 tpd NO_x emission reduction commitment for 2024, the holdings in the cases cited above suggest that a district court would be required to issue appropriate orders for its enforcement, such as an order compelling CARB to

¹⁶⁶ 668 F. Supp. 848, 852.

¹⁶⁷ *Id.* at 858 ff.

¹⁶⁸ Case No. CV97–6916–HLH (C.D. Ca., August 27, 1999) at 3, 4 (citing CAA section 304(a) and *Friends of the Earth*, 535 F.2d 165 (2d Cir.1976)).

adopt one or more enforceable measures that achieve 4.83 tpd of NO_x emission reductions by a date certain. Upon CARB's adoption and submission of any such substitute measures, the EPA would determine, through notice-and-comment rulemaking, whether the measure is sufficient to achieve the necessary emission reductions.

Earthjustice asks the EPA to explain how a suit in equity would be handled under the Eleventh Amendment to the Constitution but fails to articulate a basis for finding the commitments in the Valley Incentive Measure problematic or difficult to enforce on constitutional grounds. Although the Eleventh Amendment generally grants immunity to states from suit for money damages or equitable relief without their consent, it does not grant states immunity from suit for injunctive relief (i.e., to prevent future violations of federally-mandated SIP requirements) where the state itself has submitted SIP commitments and thereby consented to enforcement in federal court. As stated in *NRDC*, the district courts have authority under the CAA to enforce SIP provisions, and “[i]t cannot be argued” that “an order implementing [a SIP control strategy] as promptly as possible would impinge on an area of state sovereignty.”¹⁶⁹ Similarly, in *Friends of the Earth v. Carey*, the Second Circuit rejected New York City's claims of state sovereign immunity from suit in federal court and found that the City's decision “voluntarily to commit itself to enforcement of the Plan” constituted a waiver of such immunity.¹⁷⁰ The court noted that, in the context of a citizen suit to enforce the provisions of the SIP, “the choices and procedures are the products of State choice, not of federal policy, and may legitimately be enforced by the district court.”¹⁷¹

Comment 13: Earthjustice states that the EPA's proposed approach creates a new type of “black box” for national ambient air quality standards (NAAQS) other than ozone and without the conditions required under CAA section 182(e)(5). Earthjustice asserts that, “[l]ike the black

¹⁶⁹ 668 F.Supp. 848, 854 (citing *Friends of the Earth v. Carey*, 552 F.2d 25, 39 (2d Cir. 1977)).

¹⁷⁰ *Friends of the Earth v. Carey*, 552 F.2d 25, 35 (2d Cir.), cert. denied sub nom. *Beame v. Friends of the Earth*, 434 U.S. 902, 98 S.Ct. 296, 54 L.Ed.2d 188 (1977).

¹⁷¹ 552 F.2d at 39.

box, CARB and the District are now allowed to promise to reduce emissions without actually making any enforceable commitment as to how,” but that “unlike the black box, which at least requires actual contingency measures to be adopted and in place years before the compliance date, there are no actual backstops in place to make up for a shortfall.” Earthjustice asserts that the EPA must explain why Congress would have allowed such an approach after clearly providing only limited flexibility in section 182(e)(5), and only allowing such flexibility for long-term plans related to ozone.

Response 13: We disagree with Earthjustice’s suggestion that our proposed approach to approving the Valley Incentive Measure (or portions thereof) for SIP credit “creates a new type of ‘black box’” that is inconsistent with congressional intent. Section 182(e)(5) of the CAA allows the EPA to approve plan provisions that “anticipate development of new control techniques or improvement of existing control technologies” – i.e., control measures yet to be defined – for ozone nonattainment areas classified as “extreme” under subpart 2 of part D, title I of the Act. This provision is often referred to as the “black box” or “new technology” provision of the Act.

Unlike the new technology provisions that the EPA has approved in attainment plans for extreme ozone nonattainment areas,¹⁷² the Amended Valley Incentive Measure is not a provision that anticipates the development, adoption, and implementation of control measures yet to be defined. As explained in Response 2 and Response 4, CARB’s commitments in the Amended Valley Incentive Measure constitute a specific enforceable strategy for achieving specific amounts of NO_x and PM_{2.5} emission reductions in the San Joaquin Valley, either through implementation of agricultural equipment replacement projects subject to specific portions of the 2011 or 2017 Carl Moyer Guidelines or through substitute measures adopted and submitted in

¹⁷² See, e.g., 77 FR 12652 (March 1, 2012) (approving San Joaquin Valley attainment plan for 1997 8-hour ozone NAAQS), 77 FR 12674 (March 1, 2012) (approving South Coast attainment plan for 1997 8-hour ozone NAAQS), and 84 FR 52005 (October 1, 2019) (approving South Coast attainment plan for 2008 8-hour ozone NAAQS and revised attainment plan for 1997 8-hour ozone NAAQS).

accordance with specified deadlines.¹⁷³ The measure obligates CARB to monitor and report annually on the implementation of estimated numbers of such incentive projects and to adopt and submit substitute control measures on a fixed schedule, if the EPA determines that information submitted by CARB in the annual demonstration reports is insufficient to demonstrate that the identified incentive projects will fulfill the tonnage commitment.¹⁷⁴

For these reasons, we also disagree with Earthjustice’s claim that the Valley Incentive Measure allows CARB and the District “to promise to reduce emissions without actually making any enforceable commitment as to how” and without providing for any “backstops” to make up for a shortfall in required emission reductions. See Response 2 and Response 4.

Comment 14: Earthjustice states that there is no reason that these equipment replacements cannot be required by regulation, and that cleaner equipment clearly exists. Earthjustice claims that the only policy issue appears to be who should pay for these replacements, but that nothing stops the agencies from mandating these replacements and providing financial support for compliance. Earthjustice states that the replacements would then become enforceable regulatory requirements and the state and federal agencies could continue to subsidize the agricultural industry as they always have. According to Earthjustice, this would ensure that the emission reductions would occur regardless of future funding and is consistent with the requirements of the Act. Earthjustice urges the EPA to disapprove the Valley Incentive Measure as failing to comply with the Act’s basic SIP requirements and to direct CARB and the District to explore enforceable replacement mandates.

Response 14: Under the Clean Air Act, the EPA is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations.¹⁷⁵ Thus, in reviewing SIP submissions, the EPA’s role is to approve state choices, provided that they meet

¹⁷³ CARB Resolution 19-26, paras. A.1, A.2, A.5, and A.6.

¹⁷⁴ *Id.*

¹⁷⁵ 42 U.S.C. 7410(k); 40 CFR 52.02(a). *See Bethlehem Steel Corp. v. Gorsuch*, 742 F.2d 1028, 1036 (7th Cir. 1984) (“The state proposes, ... the EPA disposes”).

the criteria of the Clean Air Act. These comments are more appropriately directed to CARB during its rulemaking processes on incentive-based measures.

IV. Final Action

The EPA is partially approving the Valley Incentive Measure, as amended and clarified by the Technical Corrections Document and the 2021 Clarification Document, into the California SIP in accordance with section 110(k)(3) of the Act. Specifically, the EPA is approving those portions of the Valley Incentive Measure, as amended and clarified, that pertain to incentive projects implemented under California's Carl Moyer Program and FARMER Program, based on our conclusion that these portions of the measure satisfy CAA requirements for SIP approval. Upon our approval of these portions of the Valley Incentive Measure into the SIP, they become enforceable under the CAA and creditable for SIP purposes. The EPA is deferring action on the remaining portions of the Valley Incentive Measure.

In addition, the EPA is determining that CARB's adoption, implementation, and submission of the Valley Incentive Measure satisfies the State's commitment in the SJV PM_{2.5} Plan to bring to the Board for consideration an incentive-based measure for off-road diesel agricultural equipment and achieves 4.83 tpd and 0.24 tpd of the State's 2024 NO_x and PM_{2.5} emission reduction commitments, respectively, as codified in 40 CFR 52.220(c)(536)(ii)(A)(2).

We are codifying the approved portions of this measure as additional material in the Code of Federal Regulations, rather than through incorporation by reference, because, under its terms, the measure contains commitments enforceable only against CARB and because the measure is not a substantive rule of general applicability.

V. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this action merely

approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and
- Does not provide the EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose

substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

The Congressional Review Act, 5 U.S.C. section 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the *Federal Register*. A major rule cannot take effect until 60 days after it is published in the *Federal Register*. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by **[insert date 60 days after date of publication in the *Federal Register*]**. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Particulate matter, Reporting and recordkeeping requirements.

Dated: December 16, 2021.

Deborah Jordan,
Acting Regional Administrator,
Region IX.

Part 52, Chapter I, Title 40 of the Code of Federal Regulations is amended as follows:

PART 52 - APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for Part 52 continues to read as follows:

AUTHORITY: 42 U.S.C. 7401 *et seq.*

Subpart F – California

2. Section 52.220 is amended by adding paragraph (c)(567) to read as follows:

§52.220 Identification of plan-in part.

* * * * *

(c) * * *

(567) The following materials were submitted on February 11, 2020, by the Governor's designee.

(i) [Reserved]

(ii) *Additional materials.*

(A) California Air Resources Board.

(I) Selected portions of CARB Resolution 19-26, adopted December 12, 2019, as revised and clarified by Executive Order S-20-031, adopted November 23, 2020 and Executive Order S-21-018, adopted October 6, 2021 (Amended Valley Incentive Measure), containing CARB's commitments to achieve 4.83 tpd of NO_x reductions and 0.24 tpd of PM_{2.5} reductions by the beginning of 2024, and 4.46 tpd of NO_x reductions and 0.26 tpd of PM_{2.5} reductions by the beginning of 2025, through implementation of the Carl Moyer Memorial Air Quality Standards Attainment Program, the Funding Agricultural Replacement Measures for Emission Reductions Program, or substitute measures.

(2) [Reserved]

(B) [Reserved]